

**EFFECTIVENESS OF PRANAYAMA ON THE LEVEL  
OF DEPRESSION AMONG ELDERLY AT SELECTED  
OLD AGE HOME IN VELLORE**

BY  
**SHEELA.S**



*A Dissertation submitted to*

**THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY,  
CHENNAI.**

*In Partial Fulfilment of the Requirement for the Degree of*

**MASTER OF SCIENCE IN NURSING**

**OCTOBER - 2014**

## **CERTIFICATE**

*Certified that this is a Bonafide Work of*

**SHEELA.S**  
**ARUN COLLEGE OF NURSING, VELLORE**

*Submitted in partial fulfilment of the requirement for the requirement  
for the degree of Master of Science in Nursing for the  
Tamilnadu Dr.M.G.R medical university, Chennai – 600032.*

### **COLLEGE SEAL**

Signature \_\_\_\_\_

Mrs.J.Sunitha Priyadarshini M.Sc (Nursing), M.Sc (Psy)  
Principal, Arun College of Nursing,  
Vellore District, Tamilnadu.



**EFFECTIVENESS OF PRANAYAMA ON  
THE LEVEL OF DEPRESSION AMONG  
ELDERLY IN SELECTED OLD AGE HOME  
IN VELLORE**



BY

**SHEELA. S**

M.Sc. (Nursing) Degree Examination,  
Branch – V, Psychiatric Nursing,  
Arun College of Nursing,  
Vellore – 632001.

*A Dissertation submitted to*

**THE TAMILNADU DR. M.G.R MEDICAL UNIVERSITY,  
CHENNAI – 600032.**

*In Partial Fulfilment of the Requirement for the Degree of*

**MASTER OF SCIENCE IN NURSING**

**OCTOBER - 2014**

**EFFECTIVENESS OF PRANAYAMA ON THE LEVEL  
OF DEPRESSION AMONG ELDERLY IN SELECTED  
OLD AGE HOME IN VELLORE**

**APPROVED BY DISSERTATION COMMITTEE ON:**

**RESEARCH GUIDE** \_\_\_\_\_

MRS. J SUNITHA PRIYADARSHINI (M.SC. NURSING)  
PRINCIPAL AND HEAD OF THE DEPARTMENT RESEACH  
ARUN COLLEGE OF NURSING,  
VELLORE – 632001

**CLINICAL SPECIALITY GUIDE** \_\_\_\_\_

Mr. SAGAR K M.Sc. (N),  
LECTURER, PSYCHIATRIC NURSING,  
ARUN COLLEGE OF NURSING, VELLORE – 632001

*A Dissertation submitted to*

**THE TAMILNADU DR. M.G.R MEDICAL UNIVERSITY  
CHENNAI**

*in partial fulfilment of the requirement for*

**THE DEGREE OF MASTER OF SCIENCE IN NURSING**

**OCTOBER – 2014**

# **EFFECTIVENESS OF PRANAYAMA ON THE LEVEL OF DEPRESSION AMONG ELDERLY IN SELECTED OLD AGE HOME IN VELLORE**

**BY  
SHEELA S**

M.Sc. (Nursing) Degree Examination,  
Branch – V, Psychiatric Nursing  
Arun College Of Nursing  
Vellore – 632001

A Dissertation submitted to THE TAMILNADU Dr.M.G.R  
MEDICAL UNIVERSITY, CHENNAI, in partial fulfilment of the  
requirement for the degree of MASTER OF SCIENCE IN NURSING  
OCTOBER – 2014

---

Internal Examiner

---

External Examiner

## **DECLARATION**

I hereby declare that the present dissertation entitled **“Effectiveness of Pranayama on the level of Depression among elderly in selected old age home”** is the outcome of the original research work undertaken and carried out by me, under the guidance of **Mrs.J. Sunitha Priyadharshini M.Sc (Nursing), M.Sc (Psy)**, Principal, Arun College of Nursing, and **Mr. Sagar. K, M.sc (N), Lecturer**, Psychiatric Nursing, Arun College of Nursing, Vellore District.

I also declare that the material of this has not found in any way, the basis for the award of any degree or diploma in this university or any other universities.

**M.Sc (N) II Year**

## ACKNOWLEDGEMENT

I thank **God Almighty**, for his abundant blessings and grace which enriched me through each step of my project and enabled me to complete my study successfully.

I express my sincere gratitude to our **Managing Director Mr.L.AdhiMoolam** and **Management Trustees of Arun College of Nursing**, for providing all the facilities for the successful completion of this study.

I express my heartfelt gratitude and sincere thanks to wish **Mrs.J.Sunitha Priyadharshini, M.Sc(N), M.Sc(Psy)**, Principal, Arun College of Nursing, Vellore district for spending her valuable time with me and she gave the guidance, encouragement, valuable suggestion, support and advice given throughout the study.

I feel pleasure to extend my heartfelt gratitude and sincere thanks to my **Vice Principal Mrs.Gomathy V M.Sc (N)** Head of the department of Medical Surgical Nursing for her expert advice and valuable guidance which enlightened my path to complete my work systematically.

I would like express my sincere thanks to my guide **Mr.Sagar K, M.Sc (N), Lecturer**, Psychiatric Nursing for his encouragement, inspiration and constant support and also for spending his valuable time with me throughout the study.

I sincerely thank the Managing Trustee **Mr.Tulasi Raman, Secretary, Red Cross Society Old Age Home**, for permitting me to conduct my study in their esteemed institution and providing continuous encouragement throughout the study.

I would like express my sincere thanks to **Mrs.S.Kansal Mahariba, Asst. Professor in Mental Health Nursing, Mohamed Sathak A.J.College of Nursing, Chennai** for her valuable suggestion and content validity. I would like to thank all the **HODs, Teaching and Non-teaching faculties** and my **colleagues** who helped me directly or indirectly in carrying out my study.

I would like to take this opportunity to thank **Mr.Ashok B, M.Sc., M.Phil.,** Lecturer in Biostatistics, Adhiparasakthi College Of Nursing, Melmaruvathur, for his assistance in statistical analysis and presentation of the data.

I thank all the **participants** of my study for their wonderful participation and cooperation without whom I could not have completed my study.

Last but not least. I am always thankful to my husband, **Mr.John Wesley, MBA, MSW, MA, LLB(Hons), PGDBM, PGDRD** for his constant love, inspiration and support, and to my daughter **Fiona Wesley** for being patience with me. I submit my hearty thanks to my parents **Mr/Mrs. S. Solomon** and I also submit hearty thank to my Inlaws **Mr/Mrs. Chandrasekaran** for their support in all times of ups and downs, their prayers, their blessings rendered to me in completing my study successfully.



## **ABSTRACT**

### **STATEMENT OF THE PROBLEM**

“A study to assess the Effectiveness of Pranayama on the level of Depression among elderly in selected Old Age Home, Vellore”.

### **AIM OF THE STUDY**

To reduce the level of depression among elderly through Yogic Breathing Technique (Pranayama).

### **OBJECTIVES OF THE STUDY**

1. To find out the prevalence of depression among the elderly in selected old age home.
2. To assess the Pre and Post test level of depression among elderly.
3. To evaluate the effectiveness of Pranayama on Pre and Post test level of depression among elderly.
4. To find out the association between selected demographic variables on the level of depression among elderly.

The conceptual framework was derived from Roy's Adaptation Model. The study variables were depression and Pranayama and hypothesis were formulated.

An evaluative approach with Pre experimental design was used to achieve the objectives of the study. The study was conducted at Indian Red Cross Society Old Age Home, Poigai. The sample size was 60 elderly.

The data collection was validated and reliability was established. The researcher used validated tool for collecting data. Demographic variable proforma, Yesavage Geriatric depression scale were the various tools used by the researcher. The validity was obtained from various experts and reliability was obtained through inter rater evaluation and found to be highly reliable. The main study was conducted after the pilot study. Initially level of depression (Pre-test) was assessed for the elderly. Pranayama was practiced among the elderly. Pranayama refers to breathing exercise, breath retention and deliberate methods of inhalation and exhalation for mental and physical benefits.

This therapy enhances relaxation. This is done on daily basis for 30minutes in morning before breakfast for a period of six weeks. Techniques of Pranayama were demonstrated by the researcher. The level of depression, (Post-test) were assessed again after 6 weeks. The data obtained were analyzed using Descriptive and inferential statistics.

## **MAJOR FINDINGS OF THE STUDY WERE**

Majority of the old age people in old age home were aged between 60-65 years (30%) had duration of stay between 1-3 years in the old age homes (45%) and do not have spouse residing in the same home (95%). Most of them were females (55%), non-educated (41.67%), Hindus (88.33%), Govt. Aid (51.35%) and belongs to joint family (53.33%). Significant percentages of them have more than two children (48.33%), with monthly no income (38.33%) of old age people respectively.

## **EFFECTIVENESS OF PRANAYAMA ON DEPRESSION**

Mean and standard deviation of old age people before pranayama ( $M = 20.8833$ ,  $SD = 5.98612$ ) of elderly is not significant ( $p > 0.05$ ), whereas after pranayama there is significant difference in the

mean and standard deviation ( $M = 13.8333$ ,  $SD = 6.87705$ ) of elderly ( $p < 0.001$ ). It can be attributed to the effectiveness of pranayama on reducing depression.

Chi square test was used to find out the association between selected variables and the post test level of depression. There was no significant association between the level of depression and selected demographic variable such as gender, age, religion, educational status, type of family, marital status, monthly income and duration of stay in old age home ( $p > 0.001$ ). Null Hypotheses ( $H_0$ ) with regard to association between the level of depression and demographic variables was retained.

The above finding reveals that Pranayama was effective to reduce the depression among old age people.

## **RECOMMENDATIONS**

- ❖ The study can be conducted on a large sample to generalize the results.
- ❖ The study can be conducted in the other settings like the community and the hospitals.
- ❖ Longitudinal study can be conducted for long term effects of Pranayama on depression.
- ❖ A study can be conducted on quality of life among old age people.
- ❖ Study can be conducted to assess the various other psychological problems in old age people.
- ❖ Experimental study can be conducted with various preventive interventions on prevention of old age depression.

## LIST OF CONTENTS

Chapter	Contents	Page No
I	INTRODUCTION	1
	Background of the study	1
	Need for the study	7
	Statement of the problem	11
	Aim of the Study	11
	Objectives of the study	11
	Operational definitions	11
	Assumptions	12
	Hypothesis	13
	Conceptual framework	13
II	REVIEW OF LITERATURE	16
	Literature related to old age people	17
	Literature related to prevalence of depression among old age people	18
	Literature related to pranayama	23
	Literature related to effectiveness of pranayama upon depression among old age people	25
III	RESEARCH METHODOLOGY	28
	Research approach	28
	Research design	28
	Setting of the study	29
	Population	30
	Sample	30

Chapter	Contents	Page No
	Sample size	30
	Sampling technique	30
	Criteria for sample selection	31
	Discription of Tools	31
	Data collection	34
	Pilot study	33
	Schematic representation of Research design	36
IV	DATA ANALYSIS AND INTERPRETATION	37
V	RESULTS AND DISCUSSION	58
VI	SUMMARY, CONCLUSION, IMPLICATION & RECOMMENDATION	64
	BIBLIOGRAPHY	
	ANNXURES	

## LIST OF TABLES

Table	Title	Page No.
1	Frequency and percentage Distribution for demographic variables of elderly	40
2	Comparison between pre-test and post-test score on level of depression among elderly	51
3	Comparison of mean and standard deviation of pre test and post test level of depression among elderly	53
4	Comparison of mean and standard deviation of pre test and post test level of depression and effectiveness of pranayama among elderly	54
5	Association between the selected demographic variable and post test score on level of depression among elderly	55

## LIST OF FIGURES

Figure	Title	Page No.
1	Conceptual framework based on Roy's Adaptation Model	15
2	Schematic representation of research design	36
3	Percentage distribution of prevalence of depression	39
5	Percentage distribution of demographic variable for gender	44
6	Percentage distribution of demographic variable for educational status	45
7	Percentage distribution of demographic variable for type of family	46
8	Percentage distribution of demographic variable for Marital Status	47
9	Percentage distribution of demographic variable for Monthly Income	48
10	Percentage distribution of demographic variable for Number of Children	49
11	Percentage distribution of demographic variable for Living with spouse	50

## LIST OF ANNEXURES

Annexures	Title
I	Letter Seeking Permission to conduct the Study
II	Letter Seeking Permission to Use the Tool
III	Request for Content Validity
IV	Content Validity Certificate
V	Research Participant Consent Form
VI	Certificate For Pranayama
VII	Certificate For Tamil Editing
VIII	Demographic Variable Proforma for elderly
IX	Yesavage Geriatric Depression Scale
X	Scoring Key
XI	Blue Print for Geriatric Depression Scale
XII	Lesson Plan on Pranayama
XIII	Data Code Sheet
XIV	Master Code Sheet



## **CHAPTER-I INTRODUCTION**

**As we grow older, we must discipline ourselves to continue  
expanding, broadening, learning, keeping our minds  
active and open.”**

**Clint Eastwood.**

### **BACKGROUND OF THE STUDY**

Ageing, which is a reality of the human existence on the planet earth, plays a major role in the global demographic transition. Aged is generally defined as population above 60 years of age. A man's life is normally divided into five main stages namely infancy, childhood, adolescence, adulthood and old age. In each of these stages an individual has to find himself in different situations and face different problems. The old age is not without problems. In old age physical strength deteriorates, mental stability diminishes; money power becomes bleak coupled with negligence from the younger generation.

Welfare of Parents and Senior Citizens Act which punishes children who abandon parents with a prison term of three months or a fine, situation is grim for elderly people in India. The proportion of population of the elderly in most countries is increasing and which is inversely proportional to young population including India. Due to diminishing accepting of family responsibilities towards one's elders, old age homes are becoming a need of today's lifestyles, particularly in urban India. After retirement elderly lose their status in the society, often feel lonely, useless and helpless. Loneliness is the reason for admission in old age homes. Major portion of elderly inmates of old age

home are neglected, living alone and suffering from various health problems.

Aging is a natural process. Old age is inevitable. The concept of “old” has changed drastically over the years. The average life span is increasing, old age people tend to have more problems. It is regarded as the crucial phases in life where the physiological, psychological and socio cultural changes occur.

Old age is viewed both as a stage in the life span of an individual and also a segment of a population in the society. The public considers people who are 60-75 years of age as old. Developmental psychologists consider age sixty as the demarking line between middle and old age. In the developed world, chronological time plays a paramount role. The age of 60 or 65, roughly equivalent to retirement ages in most developed countries is said to be the beginning of old age.

There are currently 580 million elderly aged 60 globally and of these 355million live in the developing countries. The rate of death in developing countries has visibly decreased and life expectancy has increased. In the year 2020, life expectancy is predicted to reach 70. In India about 7% of the old age people is over the age of 60 and it is expected to increase by 20% by the year 2030.

According to the **United Nation Population Division** report there will be two elderly persons for every child in the world by 2050. There are 81million older people in India-11 lakh in Delhi itself. As per the estimate nearly (40%) of senior citizens living with their families are reportedly facing abuse of one kind or another, but only one in six cases actually comes to light. According to the 2001 census, (7.4 %) of total population was above the age of sixty years and in 2011 the population

of senior citizen was (8.4%). The elderly population in Tamilnadu in 2011 was (8.4%). Between the years 2011 and 2050, the world wide proportion of persons over 65 years of age is expected to be more than double from the current 8.4 percentage to 16.4 percentage.

According to a report by the **U.S. Census Bureau and the National Institute on Aging (2011)**. More than one-third of the world's oldest people (80 and above) lived in three countries: China (11.5 million), the United States (9.2 million) and India (6.2 million). Today there are 77 million old age people in India. This number is likely to rise to 177 million by 2025.

As one grows older, faces significant life changes that can put the individual at risk for depression. Major causes and risk factors that contribute to depression in old age people include both physical and psychological distress. Health problems—illness and disability, chronic or severe pain, cognitive decline, damage to body image due to surgery or disease. Living alone; a dwindling social circle due to deaths or relocation; decreased mobility due to illness or loss of driving privileges. Feelings of purposelessness or loss of identity due to retirement or physical limitations on activities. Fear of death or dying; anxiety over financial problems or health issues. The death of friends, family members, and pets; the loss of a spouse or partner.

Old age people have limited regenerative abilities and are more prone to disease, syndromes, and sickness than other adults. Depression is one of the most common and serious mental health problems that people face today. Depressive disorder is an illness that involves the body, mood, and thought. It affects the way the person eats and sleeps the way one feels about oneself. Depression affects all age groups.

Old age people experience many losses bereavement. Loss is painful whether a loss of independence, mobility, health, our long-time career, or someone we love. Grieving over these losses is normal and healthy, even if the feelings of sadness last for weeks or months. Losing all hope and joy, however, is not normal.

**According to National Institute of Health** Depression clues in older adults who deny feeling sad or depressed may still have major depression. Here are the clues to look for unexplained or aggravated aches and pains, feelings of hopelessness or helplessness, anxiety and worries, memory problems, slowed movement and speech, irritability, loss of interest in socializing and hobbies and neglecting personal care (skipping meals, neglecting personal hygiene). Approximately 20% of the old age people suffer from some form of depression.

Depression in elderly frequently coexists with other medical illnesses and disabilities. It can be triggered by a range of long term illnesses to which elderly is particularly prone, such as diabetes, stroke, cardiac disease, cancer, chronic lung disease, Alzheimer's, Parkinson's and arthritis.

**The survey done by United Kingdom** the level of depressive symptoms is linearly associated with the prevalence of cardiac events. Depression is an important risk factor for the development and progression of cardiovascular disease. Even a moderate level of depressive symptoms increases the risk for cardiac events. Depression was more impairing in terms of functioning and wellbeing than arthritis, diabetes mellitus, and hypertension, among others, and is more disruptive for social functioning than all of the chronic medical conditions. Approximately 50% of suffering from major depression can be left undiagnosed by general practitioners. Depression accounts for

\$83.1 billion in medical care and workplace costs survey done by United Kingdom.

The common cause of disability in the elderly is depression and it is an important risk factor for the development and progression of cardiovascular disease. The consequences are reduced life satisfaction and quality, social deprivation, loneliness, and impairment in the activities of daily living. It is the commonest and the most reversible mental health problem in the old age. Depression in old age carries increased risk of suicide and natural mortality. Recognition and simple intervention can reduce the demand on health and social services and community care. Despite favorable response to treatment, depression remains undetected and untreated.

**Jeffry.C et al (2009)** estimated that elderly are more sensitive to drug side effects and vulnerable to interactions with other medicines they're taking. Antidepressant drugs like selective serotonin reuptake inhibitors (SSRIs) such as Prozac can cause rapid bone loss and a higher risk for fractures and falls. Because of these safety concerns, elderly on antidepressants should be carefully monitored. In many cases, therapy and healthy lifestyle changes, such as exercise, can be as effective as antidepressants in relieving depression, without the dangerous side effects.

**Pilikington et al (2006)** Surveys have demonstrated that complementary medicine use for depression is widespread, although patterns of use vary. A series of systematic reviews provide a summary of the current evidence for acupuncture, aromatherapy and massage, homeopathy, meditation, reflexology, herbal medicine, yoga, and several dietary supplements and relaxation techniques. The quantity and quality of individual studies vary widely, but research interest in

complementary therapies is increasing, particularly in herbal and nutritional products.

Mind-body techniques used to improve depression symptoms like Acupuncture, Yoga Meditation, Guided imagery, Massage therapy. As with dietary supplements, take care in using these techniques. There are a wide variety of herbal therapies that people can use. For depression, St. John's wort and ginkgo biloba are the most popular herbals for altering depressed mood. Cost and availability of these herbals are expensive.

**Yoga practitioners** report that the practice of pranayama in senior citizens help to gain a steady mind, strong will power, enhances perception, fosters awareness and positive changes in personality. It is also beneficial to treat stress related symptoms, improving autonomic function. Yoga helps combat high blood pressure because the movements are static. This requires less blood and oxygen to assume a position. The muscles are relaxed, which improves circulation. All physical activity makes the heart stronger by making the heart pump blood efficiently. Recent researches suggest that regular practice of pranayama techniques are proved to improve the life style, quality of life s and gives the mind tranquility. Through breathing, pranayama encourages balance in the nervous system, which controls stress. The most effective way to handle stress is to change attitude toward problems. This can be achieved through pranayama, or yogic breathing. Yogic breathing exercises has a great impact on reduction of stress and by practicing pranayama senior citizen can add color to the sunset sky.

The regular practice of pranayama can be quite effective in promoting mental health, in overcoming depression, which aids the old elderly to develop a sort of resilience to any kind of mental or physical

illness. Pranayama has been reported to be beneficial in treating a range of stress related disorders, improving autonomic functions, relieving symptoms of asthma and reducing the symptoms of oxidative stress.

Establishing a daily routine of yoga breathing exercises. Pranayama can help the elderly to reduce the effects of depression. elderly are benefitted with Pranayama in improving in their quality of life. Pranayama techniques enhance well-being, mood, attention, mental focus, and stress tolerance. Proper training by a skilled yoga teacher and every day practice will maximize the benefits.

Health care providers play a crucial role in encouraging patients to practice. Pranayama could be helpful adjunct to medical and psychological treatment. It also has a greater impact on the socio-cultural context as people from rural areas is mostly poor and lack necessary medical care. Health professionals must have adequate training regarding pranayama. Indigenous method of pranayama is not only cheap but also effective in the treatment of various mental and physical distresses. Practicing pranayama is not only preventive in nature but also promotive as it increases the human potentials.

## **NEED FOR THE STUDY**

Old age is considered as second childhood. Every individual has to follow transitional changes of life from neonate to old age, and old age is the last stage of life span. The aging process is a biological reality which has its own dynamic, largely beyond human control. Old age is not an accident, it is an unavoidable incident of life. As age increases physiological and psychological functions also get aged. Aging affects the physiological functioning of all body systems. In the cardiovascular system, as blood vessels get thickened the ability of heart to pump blood

decreases. Endocrine function decreases with age as hormone receptors are less effective. Brain function declines, including short term memory loss and intellectual problems.

The psychological problems arise when people realise their loneliness. The problems can be developed from role changes, modernisation, disintegration of joint family system, physical disability, retirement from physical activity, insecurity, social isolation, death of spouse, lack of support from family members, abuse from caregivers, when social life is disrupted, or when they feel a sense of loss. This leads to slow build-up of stress and discomfort. The psychological effects of stress include anxiety, depression, loneliness, low self-esteem, and feeling of powerlessness.

Old age was never a problem in India. Old age homes were alien in concept and elder abuse was considered a Western problem but not anymore. Neglect of parents has become a big issue, so much so that the Indian government has passed "The maintenance and welfare of parents and senior citizens bill 2006", which makes it imperative for adult children to look after their parents.

Healthy ageing is not only related to the advances in medical technology but also to a wide range of other factors like enabling the aged to lead a stimulating life, being fully involved in society and having meaningful social relationships.

**According to WHO** nearly 16 percentage of Americans who are 65 years or older are esteemed to be depressed resulting from stress. Over 1.2 million people are being isolated in their old age at United Kingdom<sup>19</sup>. In India nearly 90 million elderly persons (over 60years) suffer in 'God's language' which is 'silence'. The aging population of



Tamilnadu is found to be 1.7 crore and research shows 21.7 percentage of elderly with stress-related depressive disorders in Chennai. A cross-sectional study was conducted among the age group of sixty years and above on the prevalence of stress-related symptoms among elderly at chennai. The sample size was 627 people who were selected using simple random sampling. The data was collected using World Health Organization wellbeing index. The prevalence of depression in elderly population was determined as 21.7percentage. The researcher found that WHO wellbeing Index is effective in assessing depression in aged population and depression rate increases as age increases.

**Chou K.L (2004)** A descriptive study was conducted among elderly over 65 years to find out the prevalence of depression related to stress in the community dwelling area at Taiwan. The sample size was 1500 subjects and data was collected using Geriatric Mental State Schedule. The study result showed that prevalence of psychiatric disorders is (37.7%) and six percentage of major depression. The researcher concluded that prevalence of depression was more in old age people.

**Prince et al., (2000)** A study was conducted in Taiwanese in the year 2000, on depression and loneliness in rural community – dwelling elders. A total of 201 older rural community residents participated in the study. The data was collected based on Taiwanese elderly stress inventory schedule. The results revealed that there was a high association among depression level and mood status. The study recommended the efficacy of interventions for treating and preventing stress in older rural community dwelling elders.

Complementary medicine use for depression is widespread, although patterns of use vary. A series of systematic reviews provide a

summary of the current evidence for acupuncture, aromatherapy and massage, homeopathy, meditation, reflexology, herbal medicine, yoga, and several dietary supplements and relaxation techniques. The quantity and quality of individual studies vary widely, but research interest in complementary therapies is increasing, particularly in herbal and nutritional products. Major questions are still to be answered with respect to the effectiveness and appropriate role of these therapies in the management of depression.

Yoga is also effective for alleviating depression. Even a short trial of yoga led to decreased depression. The decreased depression may relate to the changes in brain waves and the decreased cortisol levels noted during yoga weekly. Yoga sessions led to increased alpha waves (sign of increased relaxation) and decreased cortisol. Considerable evidence exists for the place of mind body medicine in the treatment of depression. Excessive depression is maladaptive.

Pranayama controlled breathing with roots in traditional yoga shows promise in providing relief for depression. The program, involves several types of cyclical breathing patterns, ranging from slow and calming to rapid and stimulating, and is taught by the nonprofit Art of Living Foundation.

Clinical depression is a common illness, with prevalence of current depressive symptoms in the general population of nearly 10% and lifetime diagnosis almost 16%. Pranayama offers an attractive option for complementary therapy of depression. The purpose of this study was to examine research regarding the benefits of pranayama for depression, to learn to what extent yoga is beneficial as a complementary therapy.

Even though Pranayama is very beneficial there is paucity of research in this area especially for old age people. Thus the investigator is interested to assess the effectiveness of Pranayama on depression among old age people. In turn it will help to enhance quality of life and emotional wellbeing of the old age people.

## **STATEMENT OF THE PROBLEM**

Effectiveness of Pranayama on the level of Depression among elderly in selected Old Age Home, at Vellore District.

## **AIM OF THE STUDY**

To reduce the level of depression among elderly through Yogic Breathing Technique (Pranayama).

## **OBJECTIVES OF THE STUDY**

- To find out the prevalence of depression among the elderly in selected old age home.
- To assess the Pre and Post test level of depression among elderly.
- To evaluate the effectiveness of Pranayama on Pre and Post test level of depression among elderly.
- To find out the association between selected demographic variables on the level of depression among elderly.

## **OPERATIONAL DEFINITIONS**

### ***Effectiveness***

In this study effectiveness refers to the significant reduction in the level of depression after Pranayama as measured by Yesavage geriatric depression scale.

### ***Pranayama***

In this study pranayama refers to breathing exercise, breath retention and deliberate methods of inhalation and exhalation. This is done on daily basis for 30 minutes in morning for a period of six weeks. The client can sit in any comfortable position.

### ***Old Age/Depression***

In this study depression refers to a state of mood and thought in which the individual is sad, worried, loses interest in life, loses energy, hopelessness, and worthless, as measured by Yesavage geriatric depression scale.

### ***Elderly***

In this study elderly refers to the both male and female aged 60 - 80 years residing in the selected old age home.

### ***Selected Old Age Home***

In this study old age home refers to Old Age Home in Poigai, Vellore District which is run by Red Cross Society and who provide food and shelter on free or paid basis.

## **ASSUMPTIONS**

- ❖ Depression among elderly is very common.
- ❖ Elderly suffer from depression due to loss of loved ones, changes in life style, loneliness.
- ❖ Depression can be controlled if identified early.
- ❖ Psychosocial interventions help to deal with day to day stressors among elderly.
- ❖ Pranayama enhances coping ability and emotional wellbeing among elderly.

## NULL HYPOTHESES

H<sub>O1</sub>: There will be no significant difference in the Pre test and Post test level of depression among elderly.

H<sub>O2</sub>: There will be no significant association between the demographic variables and the Pre test and Post test level of depression in elderly.

## DELIMITATIONS OF THE STUDY

*The study is delimited to:*

- ❖ selected 60 elderly.
- ❖ selected Indian Red Cross Society Old age home, Poigai in Vellore.
- ❖ selected yogic breathing techniques (pranayama).
- ❖ assess only those items included in Yesavage Geriatric Depression scale.

## CONCEPTUAL FRAMEWORK

The Conceptual framework in this study is based on Roy's Adaptation Model which involves four concept: Person, Nursing, Health and Environment.

The Adaptive system has four components like Input, Processes, Effectors, Output. For the present study the above mention components have been modified as follows:-

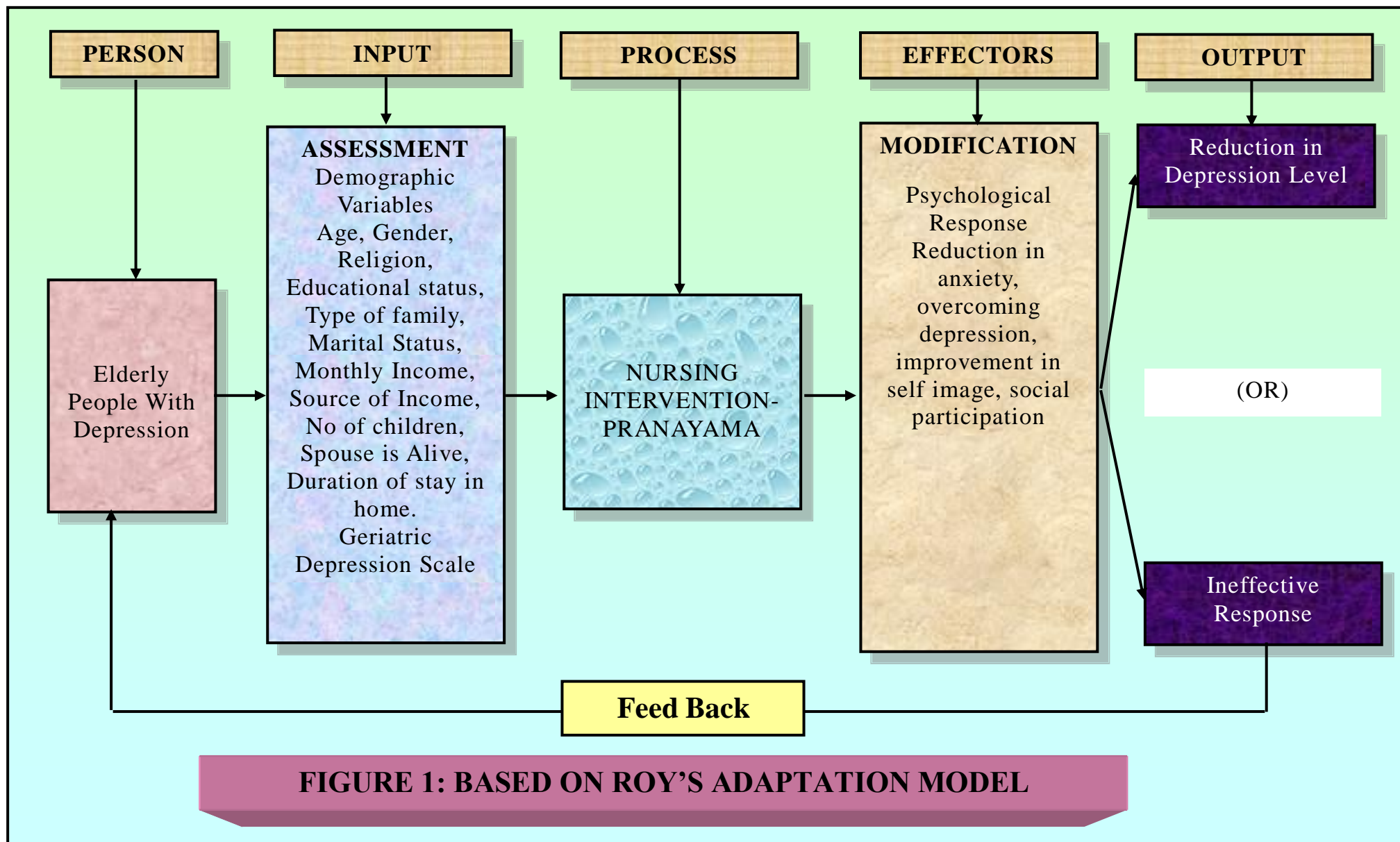
Roy states that the recipient of nursing care may be the individual, a family, a group, a community or a society. Each is considered as an adaptive system. In this study the focus is on individual. Person as living systems, are in constant interaction with their environment.

The constant interaction of a person with their environment is characterized by both internal and external change. With this changing world person must maintain their own integrity i.e., each person must make some kind of adaptation for better existence. Hence, the person is viewed as an adaptive system. It has input, coming from the external environment as well as internally from itself. In this study assessment of depression levels of elderly people was taken as input.

Roy has utilized the term coping mechanisms to describe the control process of the person as an adaptive system. Some are inherited or genetic, other mechanisms are learned. In this study Pranayama are learned and practiced by the elderly people under the supervision to cope up with the depression.

Effectors refers to the regulator and cognator. These are sub-systems of a person as a system. It is viewed as acting with found adaptive mode such as physiological function, self-concept, role function and interdependence. In this study the effectors are adaptive mode of the elderly people, which are regulator by psychological changes gained through the practice of pranayama.

Output of the person as a system is the behavior of the person output behaviors can be both external and internal. These behaviors may be observed, measured or subjectively reported, becomes the feedback to the system. Roy states output of the system either as adaptive response or ineffective response. In this study positive or negative responses to yoga therapy on depression become the output. It can be either positive, reduction in depression level (or) negative result, such as no reduction in depression. In this case the negative responses become the feedback where it must be reassessed and re-instituted with the yoga therapy in the same manner (or) in a modified way.



## **CHAPTER-II**

### **REVIEW OF LITERATURE**

A literature review involves the systematic identification, location, scrutiny and summary of written materials that contain information on research problem (Polit and Hungler 2007).

### **REVIEW OF LITERATURE**

The review of literature has two major goals: (1) To provide readers with an overview of existing evidence on the problem being addressed and (2) To develop an argument that demonstrates the need for the new study. According to nursing research by polit (2008), “Review literature is a written summary of the state of evidence on a research problem”.

This chapter deals with a review of published and unpublished research studies and from a related material. For the present study the review will help the investigator to develop an insight into the problem area.

The review of literature is presented under the following headings.

- ❖ Literature related to old age.
- ❖ Literature related to prevalence of depression among elderly.
- ❖ Literature related to Pranayama.
- ❖ Literature related to effectiveness of pranayama upon depression among elderly people.



## **LITERATURE RELATED TO OLD AGE**

**Lahti (2011)** conducted a study in the city of Helsinki to examine changes in leisure-time physical activity of moderate and vigorous intensity among ageing employees facing transition to retirement over a follow-up of 5-7 years. Old-age retirees (50 – 65 years) increased significantly their time spent in moderate-intensity physical activity. Leisure-time physical inactivity at follow-up was lower among old-age retirees compared with employees of nearly the same age. Encouraging people to leisure-time physical activity after retirement is worthwhile as the increase in free time brings new possibilities.

**Fasey (2009)** conducted study on grief, which is reviewed with particular reference to old age. The characteristics of normal and abnormal grief were noted and possible comparison between older and younger adults is made. The results are inconclusive but suggest that grief is a similar process in all adults but may be less malign in the over 65 years. The differences, elaborates that grief is a serious problem with a definite associated morbidity and mortality particularly in old age. Lifestyle factors included physical activity, body mass index, number of alcohol drinks per week and smoking. Being overweight in both age periods was associated with 1.5 (95%). Therefore, physical activity and prevention of overweight at all ages should be stimulated to prevent physical decline in old age.

**Grimby (2005)** conducted study among 76-Year-Old Swedish Urban Citizens regarding Health-related quality of life was measured in terms of energy, pain, emotions, sleep, social isolation and mobility with the Nottingham Health Profile (NHP). Five hundred and sixty-five participants, 76-year-old participated and the results were analyzed, impaired quality of life was correlated to observed and perceived illness,

institutionalization, widowhood, loneliness and financial discontent. Women reported more pain, emotional, sleep and mobility problems than men. Mobility problems had the most negative impact on daily activities.

## **LITERATURE RELATED TO PREVALENCE OF DEPRESSION AMONG ELDERLY**

**Kumar et al. (2013)** conducted a case control frame work to study the nature, prevalence and factors associated with geriatric depression in a rural south Indian community. Thousand participants aged over 65 years from Kaniyambadi block, Vellore, India. Prevalence of geriatric depression (ICD-10) within one month was found in 12.7% among low income, experiencing hunger, history of cardiac illnesses, transient ischemic attack, past head injury and diabetes. ,increased the risk for geriatric depression after adjusting for other determinants using conditional logistic regression Geriatric depression is prevalent in rural south India.

**Gerald (2011)** et al. conducted a cross sectional international study on late life depressive symptoms. Using a self-administered questionnaire and Patient Health Questionnaire-9 diagnostic survey on 1115 patients aged 60–93 years who attended a primary care clinic in Korea, Russia or USA. At least mild depression occurred in 28% of Koreans, 65% of Russian and 27% of US participants. Russians scored more depressed ( $P < 0.01$ ) and more suicidal thoughts, while Koreans had less feelings of worthlessness. Depressive symptoms were more common in Russia than in Korea and USA but had less impact on daily functioning.

**Poongothai (2010)** estimated the prevalence of depression in an urban south Indian population. Subjects were recruited from the Chennai

Urban Rural Epidemiology Study, involving 26,001 subjects randomly recruited from 46 of the 155 corporation wards of Chennai city in South India. 25,455 subjects participated in this study (response rate 97.9%). The overall prevalence of depression was 15.1% and was higher in females (females 16.3% vs. males 13.9%,  $p < 0.0001$ ). The prevalence of depression was higher in the low income group (19.3%) compared to the higher income group (5.9%,  $p < 0.001$ ). Prevalence of depression was also higher among divorced (26.5%) and widowed (20%) compared to currently married subjects (15.4%,  $p < 0.001$ ). This is the largest population-based study from India to report on prevalence of depression.

**Baldwin (2009)** conducted a study regarding the common misconception about the prevalence of depression among old age is a normal part of ageing, but the evidence shows that multiple health problems often account for any initial association between depression and older age. Depression is essentially the same disorder across the lifespan, although certain symptoms are accentuated and others are suppressed in older people. Depression typically report more physical symptoms and less sadness compared to younger people with depression additionally, psychotic symptoms, melancholia, insomnia, hypochondriasis, and subjective memory complaints are more likely to occur in older people with depression compared to younger people with depression.

**Fiske (2009)** Depression is more prevalent among older adults than among younger adults but can have serious consequences. Over half of cases represent a first onset in later life. Depressed older adults are less likely to endorse affective symptoms and more likely to display cognitive changes, somatic symptoms, and loss of interest than are younger adults. Preventive interventions including education for

individuals with chronic illness, behavioral activation, cognitive restructuring, problem-solving skills training, group support, and life review have also received support.

**Jeffery et al. (2009)** conducted an observational cohort study to characterize the one-year outcomes of minor and sub syndromal depression, examining the predictive strength of a range of putative risks including clinical, functional and psychosocial variables. Patients with baseline minor and sub syndromal depression were more depressed than the non-depressed group at follow-up. Patients had a 7.0-fold (95%) risk of developing major depression, and a one-year adjusted Hamilton Depression Score of 11.0 (95%) compared with 7.8 (95%) for the non-depressed group; these outcomes were less severe than those of the major depression group.

**Jesica (2009)** a study was tested whether history of depression is associated with an increased likelihood of having dementia, and to verify whether a first depressive episode earlier in life is associated with an increased likelihood of dementia. Depression information was collected from national hospital discharge registries, medical history, and medical records. Each 1-year increase in the difference between depression onset and dementia onset decreased the likelihood of dementia by 8.4%.

**Edmond et al. (2008)** conducted a descriptive longitudinal cohort study, was done in National Institute of Mental Health (NIMH). To compare the rates of depression in Alzheimer Disease. A cohort of 101 patients meeting criteria for possible/probable Alzheimer Disease, The baseline frequency of depression (44%) was higher than that obtained using DSM-IV criteria for major depression (14%;  $p < 0.001$ ) and major

or minor depression. criteria identified that a greater proportion of Alzemiars Disease patients was depressed.

**Dougall et al. (2007)** a community-based, cohort study was conducted on Cognitive Function and Ageing. Study Following screening of 1300 people aged 65 and over from a population base, the prevalence of depression was 8.7%, increasing to 9.7%. Subjects with concurrent dementia were included and it was fond that depression was more common in women (10.4%) than men (6.5%) and was associated with functional disability, co-morbid medical disorder, and social deprivation. The prevalence of depression in the elderly is high and remains high into old age, perhaps due to increased functional disability.

**Fried (2006)** conducted study to examine suicidal behavior and depression prevalence among a group of Medicare patients age 65 with functional impairment A Medicare demonstration (N=1,605) that enrolled primary care patients in 8 counties in New York, 6 counties in West Virginia, and 5 counties in Ohio. All demonstration participants age 65 (n=164). 14.8% of the patients indicated suicidal ideation, 4.9% reported a suicide attempt and 25.9% indicated at least 1 lifetime suicide attempt, 34.6% had a major depressive episode and 58.3% had clinically significant depressive symptoms during the previous week. These levels of suicidal ideation and behaviors and of depression are far higher.

**Alex (2005)** a study to find out the depression in old age has a poor long-term prognosis; evidence shows that the same is true of depression in middle age. Prognosis of depression in late life with depression in midlife under similar conditions. The response and remission rates to pharmacotherapy and electroconvulsive therapy are not sufficiently different in old-age depression and middle-age depression to be clinically significant. Findings underline the

importance of assessing factors related to patient age and not just to age itself in evaluations of risk factors for poor prognosis.

**Coen (2003)** conducted study to determine depressed mood is associated with unhealthy lifestyles in late middle aged and older people, with or without chronic somatic diseases. A sample of 1,280 community-dwelling people from the Netherlands, their associations between depressive symptoms and lifestyle domains were analysed cross-sectionally and longitudinally – using logistic regression analyses and multivariate analyses of variance, depressed people were more likely to be smokers (95%).

**Sandra et al. (2002)** compared regional brain volumes in depressed elderly subjects with those of non-depressed elderly subjects by using voxel-based morphometry. They used statistical parametric mapping to analyze magnetic resonance imaging scans from 30 depressed patients 59 to 78 years old and 47 non-depressed comparison subjects 55 to 81 years old. Depressed patients had smaller right hippocampal volume than comparison subjects. These data provide further evidence of structural brain abnormalities in geriatric depression, particularly in patients with a longer course of illness.

**Prince et al. (2000)** reported a very strong cross-sectional association between handicap and late-life depression. The study was conducted in United Kingdom. There was a moderate association between pervasive depression and the number of life events experienced over the previous year. There was a stronger, graded, relationship between the number of social support deficits and depression. Loneliness was itself strongly associated with depression.

## **LITERATURE RELATED TO PRANAYAMA**

**Roopa et al. (2012)** study was conducted to ascertain if a short-term practice of pranayama and meditation had improvements in cardiovascular functions in healthy individuals with respect to age, gender, and body mass index (BMI) conducted in the Department of physiology of S.N. Medical College, Bagalkot. After practicing pranayama and meditation for 15 days the response was similar in both the genders, both the age groups with BMI,  $<25 \text{ kg/m}^2$  and  $>25 \text{ kg/m}^2$ . This study showed beneficial effects of short term (15 days) regular pranayama and meditation practice on cardiovascular functions irrespective of age, gender, and BMI in normal healthy individuals.

**Dunn (2011)** conducted study on the physiological effects underlying of therapeutic benefits of pranayama. It was estimated that 7.4 million Americans currently practice Hatha yoga (pranayama). 64 percentage of individual's practices yoga report doing well-being. Researches have reported an association between yoga practice and subjective well-being. A brief description of Hatha yoga (pranayama) is provided that describes the purported relationship between yoga and the relaxation response.

**Grabara (2011)** conducted study was to assess the influence of pranayama (hatha yoga exercises) on the shaping of the antero-posterior spinal curvature in first-year students of the University of Physical Education in Katowice who participated in hatha yoga classes. 72 women and 46 men took part in the study. Hatha yoga classes were held once a week for 90 minutes over a period of 15 weeks. Measurements of the subjects' spines were performed twice, first before the start of the classes and then after all the classes were finished. The inclination of the anteroposterior curvature of the spine, i.e. the thoracic kyphosis and

lumbar lordosis angles, were measured with a Rippsteinplurimeter. After completing the hatha yoga classes, the majority of students (50-62%) were found to have correct angular values of the thoracic kyphosis and lumbar lordosis when compared to the measurements taken before the start of classes (40-45%). An assessment on the shaping of the anteroposterior curvature of the spine finds that hatha yoga exercises have a positive impact on one's body posture in the sagittal plane.

**Acharya ( 2010 )** conducted study on twenty male junior footballers younger than 15 years of age, belonging to the MohunBagan Athletic Club, Kolkata, were selected for the study at Haridwar. They were of age  $14.65 \pm 0.58$  years. Subjects were exposed to pranayama practices training session. There was a significant reduction in the levels of serum cholesterol, Low-density lipoprotein (LDL) cholesterol, serum triglycerides, and very-low-density lipoprotein (VLDL)-cholesterol at the end of the *yoga* session. The results indicated that the fasting blood sugar (FBS) level was positively elevated in junior footballers. This demonstrated that Pranayama and Yogasana were helpful in regulating.

**Saxena (2009)** conducted study on the effect of breathing exercises (*pranayama*) in patients with bronchial asthma. Fifty cases of bronchial asthma were studied for 12 weeks. Patients were allocated to two groups: group A and group B. Patients in group A were treated with breathing exercises for 20 minutes twice daily for a period of 12 weeks. Group a subjects had significant improvement in symptoms, as compared to group B subjects. Breathing exercises (*pranayama*), mainly expiratory exercises, improved lung function subjectively and objectively and had a regular part of therapy.

**Avnish et al (2008)** studied the effectiveness of pranayama on Diabetes, which is a complex condition with a multitude of metabolic



imbalances involving the regulation and utilization of insulin and glucose in the body. Yoga effectiveness at preventing and treating diabetes is due to its emphasis of a healthy diet and lifestyle as well as its ability to balance the endocrine system, massage and tone the abdominal organs, stimulate the nervous and circulatory systems, and reduce stress.

## **LITERATURE RELATED TO EFFECTIVENESS OF PRANAYAMA UPON DEPRESSION AMONG ELDERLY**

**Kumar et al. (2012)** conducted a study on anxiety and depression are the two most common mental problems facing the aged and are often ignored. Study attempts to find out the impact of pranayama on the anxiety and depression of the senior citizens living in the rural community. For the study, 30 senior citizens of Madhubani town have been selected. Their level of anxiety and depression were measured on Sinha Anxiety Scale and Beck Depression Inventory prior to their enrolment in Yoga sivr (camp) of 7 days duration where they were trained in anuloma-viloma technique of pranayama. Their level of anxiety and depression were again measured after 3 months during that period the subjects regularly practiced the pranayama. The comparison of the two scores showed significant impact of the pranayama on their, anxiety and depression.

**Brown (2011)** suggested that Mind-body interventions are beneficial in stress-related mental and physical disorders. Yogic breathing is a unique method for balancing the autonomic nervous system and influencing psychologic and stress-related disorders. An effect of yogic breathing demonstrates on brain function and physiologic parameters. A sequence of breathing techniques can alleviate anxiety, depression, everyday stress, post-traumatic stress, and stress-related

medical illnesses. This model has heuristic value, research implications, and clinical applications.

**David et al. (2008)** conducted study on pranayama (Hatha yoga) for depressed patients are taking anti-depressant medications but are only in partial remission. Twenty-seven elderly women and 10 elderly men were enrolled in the study, of which 17 completed the intervention and pre-and post-intervention assessment data. All participants were diagnosed with unipolar major depression in partial remission. Significant reductions were shown for depression, anger, anxiety, neurotic symptoms and low frequency heart rate variability in the 17 completers. Moods improved from before to after the yoga classes. Yoga appears to be a promising intervention for depression; it is cost-effective and easy to implement.

**Pilnkington et al. (2005)** National Institute of Mental Health and Neuroscience in India conducted a study on pranayama technique, this method, also referred to as "The Healing Breath Technique", involves breathing with a natural breath through the nose, mouth closed. Study examined the effects of on depressive symptoms in 60 elderly men. Participants were randomly assigned to two weeks of pranayama. After the full three weeks, scores on a standard depression inventory dropped 75% in the pranayama group, as compared with 60% in the standard treatment group. It was suggested that pranayama might be a beneficial treatment for depression in the early stages of depression.

**Ford (2005)** conducted the open, randomized clinical trial, in the Biometry and Nutrition Group, Agharkar Research Institute, compared the efficacy of pranayama against both electroconvulsive therapy (ECT) and the drug imipramine. In this study, consisting of 37 elderly participants and taking place over a period of 7 weeks, During the study,

participants practiced 30 minute daily sessions and once-weekly 75 minute sessions regularly. Researchers found that, although clients inferior to ECT, pranayama has shown to be as effective as imipramine in the treatment of depression.

**Janakiramaiah et al. (2000)** conducted the study on 15 dysthymic and 9 melancholic elderly depressed patients to 15 normal control individuals. The Hamilton Rating Scale for Depression, the Beck Depression Inventory, and the Clinical Global Impressions Scale, and then treated the patients with Pranayama. study showed that pranayama was effective in treating mild and melancholic depression. By day 30 there was significant relief from depression in the groups treated with pranayama, as measured by the P300 amplitude and standard depression scales. By day 90, their P300 had returned to normal: their P 300 was indistinguishable from normal controls and they remained stable and depression free.

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

The methodology in the research study is defined as the way the data are gathered in order to answer the research questions or analyze the research problem. The research methodology involves a systematic procedure by which the researcher had a start from the initial identification of the problem to its final conclusion.

The present study is to assess the effectiveness of Pranayama in decreasing the level of depression among elderly people. The chapter deals with a brief description of different steps under taken by researcher or the study. It involves research approach, the setting, population, sample and sampling technique, selection of the tool, validity, reliability, pilot study, data collection procedure and plan for the data analysis.

#### **RESEARCH APPROACH**

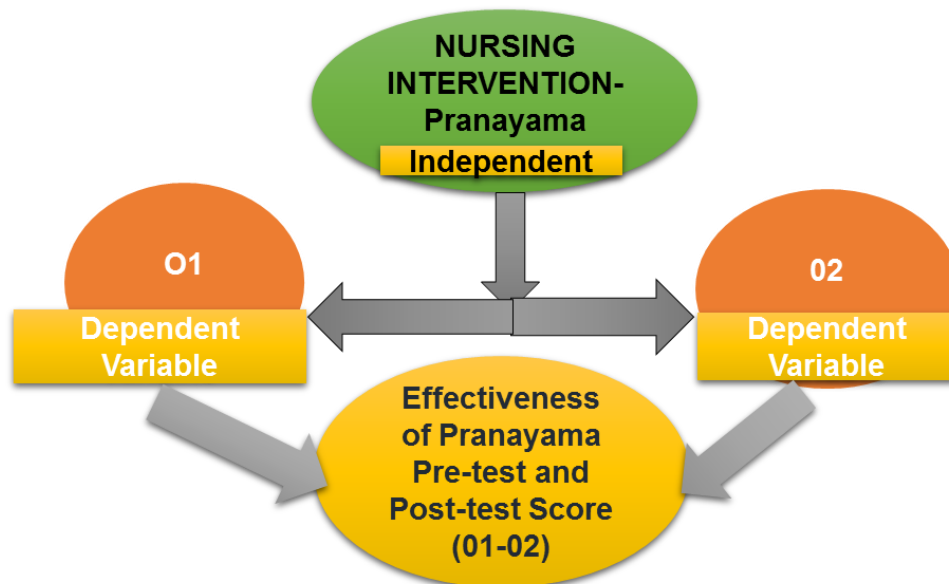
Research approach is the most significant part of research. According to Polit and Beck (2008) experimental research is an extremely applied form of research and involves finding out how well a practice are working. Its goal is to assess or evaluate the success of the programme. In this study, the researcher used Evaluative Approach to assess the effectiveness of Pranayama on depression among elderly.

#### **RESEARCH DESIGN**

The research design selected for this study is one group pre-test and post-test Pre experimental design.

*The design has illustrated by using notation as:*

	<b>O1</b>	<b>X</b>	<b>O2</b>
<b>O1</b>	- Pre-Test level of Depression before Pranayama.		
<b>O2</b>	- Post-Test level of Depression after Pranayama.		
<b>X</b>	-Demonstration of Pranayama.		



A single test group was selected and the dependent variable (depression level) was measured. Independent variable (pranayama) was then introduced and again the dependent variable (depression level) was measured. The effect of treatment (independent variable) would be equal to the level of phenomena mean value after the nursing intervention (O2) minus the level of phenomena before nursing intervention (O1). Here O is denoted for the dependent variable.

## **SETTINGS OF THE STUDY**

This study was conducted in Vellore District. The elderly from Indian Red Cross Society Old Age Home, Poigai.

## **RED CROSS SOCIETY OLD AGE HOME**

It is 15 km away from Arun College of Nursing, Vellore. It has resident population of 27 males and 43 females. It is managed by Indian Red Cross Society.

## **POPULATION**

In this study the target population was 60 elderly.

## **VARIABLES**

### ***Independent Variable***

The variable hypothesized to the outcome variable of interest. In this study the independent variable is Pranayama.

### ***Dependent variable***

The variable hypothesized to depend on or be caused by another variable. In this study the dependent variable is Depression.

### ***Sample***

Elderly residing in Indian Red Cross Society old age home, Poigai, Vellore, who meet's the inclusion criteria.

### ***Sample Size***

A sample of 60 elderly who meet the inclusion criteria will chosen for the study.

## **SAMPLING TECHNIQUE**

Polit and Beck (2006) Sampling technique refers to process of selection of a portion of the population to represent the entire population.

Purposive sampling technique will be used to select the samples from the respective settings.

## **SAMPLING CRITERIA**

### ***Inclusion criteria***

The study includes elderly who :-

- ❖ are residing in selected old age home.
- ❖ can speak and understand Tamil or English.
- ❖ are willing to participate in the study.
- ❖ are aged 60-80 years.

### ***Exclusion criteria***

The study excludes elderly who are :-

- ❖ with Respiratory and Cardiac problem.
- ❖ having cognitive disturbances.
- ❖ with sensory deficits like blindness, hearing loss etc.
- ❖ already practicing pranayama.

## **SELECTION AND DEVELOPMENT OF STUDY INSTRUMENTS**

The study aimed at evaluating the effectiveness of Pranayama on the level of depression among elderly. The instruments used in the study were,

***The tool is divided into 2 parts.***

- ❖ Demographic variables proforma of elderly
- ❖ Yesavage Geriatric depression scale

### ***Demographic variable proforma of elderly***

The demographic variable proforma consisted of age, gender, religion, marital status, type of family, educational status, monthly income, source of income, number of children, type of family and duration of stay in old age home.

### ***Yesavage Geriatric depression scale:***

Geriatric depression scale is standardized instrument to assess depression among old age people, developed by Yesavage et al in 1982. This tool consist of 30 Yes/No questions to assess the level of depression among the old age people. The researcher interviews the study participants and marks Yes/No along with the score. It consists of positive and negative response of 30 items related to old age depression with yes or no options, each depressive answer count one. Questions 1, 5,7,9,15,19,21,27,29 and 30 has “No” response count one for each and for the rest if response is “Yes” count one. Scores are added and interpreted as follows,

### **SCORING**

- ❖ Mild depression 0-10,
- ❖ Moderate depression 11-17,
- ❖ Severe depression > 17.

### **RELIABILITY OF THE STUDY INSTRUMENTS**

#### ***1. Geriatric depression scale***

Reliability is the degree of consistency with which an instrument measures the attributes which is designed to measure (Polit and Hungler 2007). Geriatric depression scale was developed by Yesavage is a standardized tool. Original version of Geriatric depression scale has



internal consistency (alpha 0.94); split half reliability (0.94) and the test retest correlation of 0.730 over a week.

## ***2. Demographic variables proforma of old age people***

The instruments used in the study were Demographic variable Proforma. The experts have suggested some specific modifications in the demographic variables proforma. The modifications and suggestions of experts were incorporated in the final preparation of the tool.

### **PILOT STUDY**

The researcher conducted pilot study before the main study to achieve the following purpose:

- ❖ To understand and handle the difficulties that may be encountered in the actual study.
- ❖ To become familiar with the use of the study tools.
- ❖ To find out the feasibility and application of the tools.
- ❖ To find out the sensitivity of the tools.

The pilot study was carried out during 1<sup>st</sup> November to 14<sup>th</sup> December 2013 in Indian Red Cross Society Old Age Home, Poigai, Vellore.

Ten samples of elderly were selected by purposive sampling technique. The pilot study showed that the tool was understandable by the elderly and they were eager to learn yoga.

The elderly spontaneously shared their difficulties in the management of depression level and they were happy to participate in the study. The time taken to collect the data from elderly was 30

minutes each during pre-test and post-test. The result of the study after computing the value showed that there were statistically significant improvements in the depression level among elderly. The yoga technique was demonstrated to the elderly and they were advised to follow it for 6 weeks and post-test was conducted. No changes were made in the tool after pilot study.

## **DATA COLLECTION PROCEDURE**

The data collection is the gathering of information needed to address a research problem. The study was conducted in the Indian Red Cross Society Old Age Home, Poigai, Vellore. The data collection was done for a period of 6 weeks from 1.1.2014 to 12.2.2014.

Rapport was established by a brief introduction about the research purpose. After the initial introduction by the researcher obtained informed consent from the study participants. An assurance was given regarding confidentiality before the data collection procedure. Data was collected through interview method by using instruments (Demographic variable proforma, Geriatric depression scale - standardized instrument to assess depression among elderly, developed by Yesavage et al in 1982).

Geriatric depression scale was administered to all inmates and the prevalence rate was found. By Purposive sampling technique, 60 elderly were selected for data collection.

The data collection was done for period of six weeks on selected samples. The study participants practiced pranayama for 30 minutes, in Indian Red Cross Society Old Age Home, Poigai, Vellore. Study participants gathered in the common hall meant for them in old age home. Techniques of pranayama were demonstrated by the researcher.

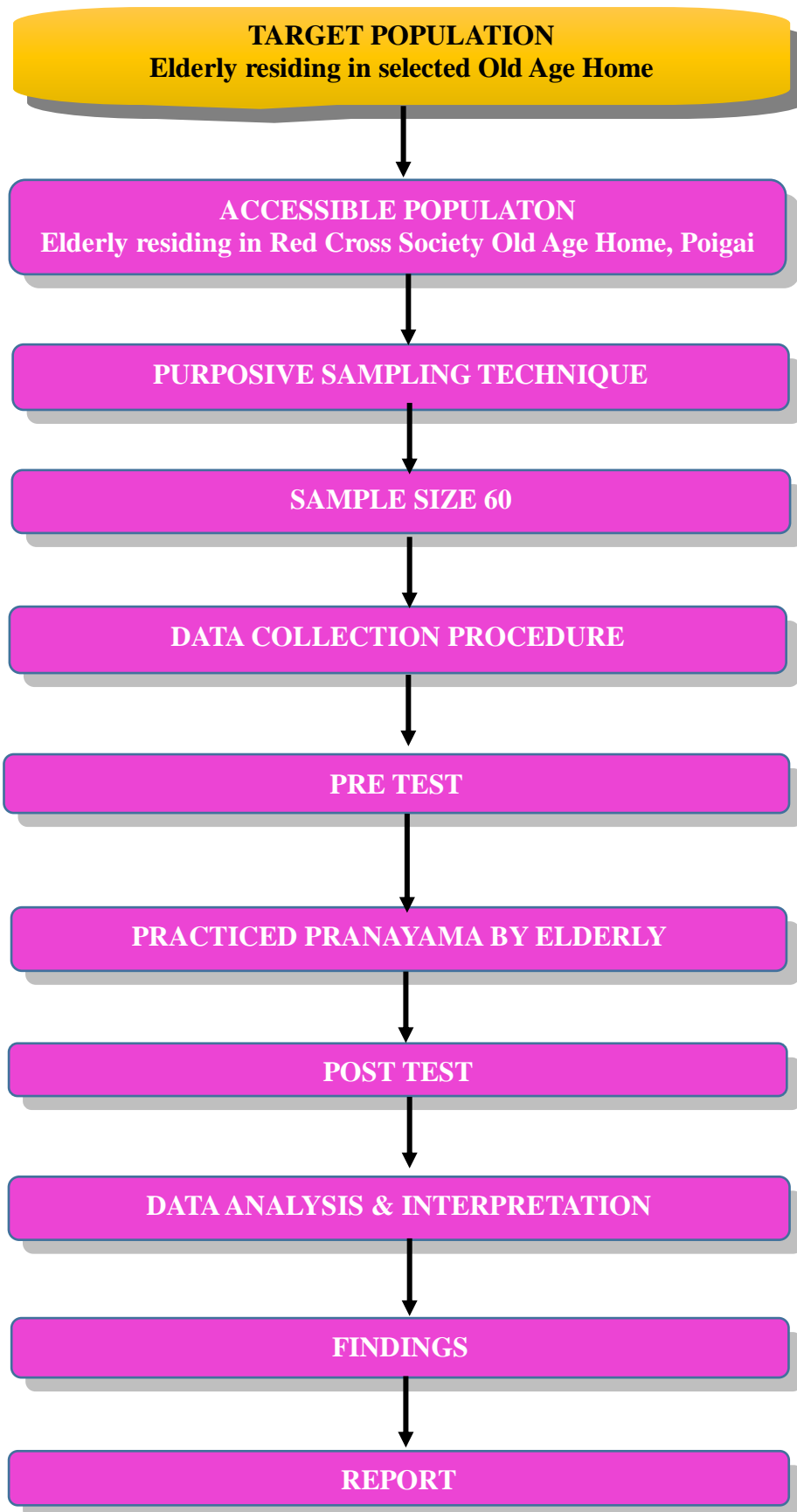
Pranayama was practiced by the study participants before break fast for a period of six weeks. After six weeks the depression scores was assessed by Yesavage Geriatric Depression Scale.

## **PLAN FOR DATA ANALYSIS**

Data analysis helps the researcher to organize, summarize, evaluate, interpret and communicate the numerical facts. For the present study the collected data from the participants would be grouped and analyzed using both descriptive and inferential statistical methods.

## **ETHICAL CONSIDERATION**

Approval from the research committee and concerned authorities was obtained. Informed written consent was obtained from the study participants. Confidentiality was maintain throughout this study. Thus ethical issues were ensured in this study.



**FIGURE-2- SCHEMATIC REPRESENTATION OF RESEARCH DESIGN**

## **CHAPTER-IV**

### **ANALYSIS AND INTERPRETATION**

The analysis is defined as the method of organizing data in such a way that the research questions can be answered. Interpretation is the process of the results and of examining the simplification of the findings with in a broader context. (Polit and Beck, 2004)

This chapter includes both descriptive and inferential statistics. Statistics is a field of study concerned with techniques or methods of collection of data, classification, summarizing, interpretation, drawing inferences, testing of hypotheses, making recommendation, etc- (Mahajan 2004)

The data was collected from elderly in Indian Red Cross Society old age home, Poigai to determine the effectiveness of pranayama upon depression. The data were analyzed according to the objectives and hypotheses of the study. Analysis of study was completed after all the data was transferred to the master coding sheet. The investigator used descriptive and inferential statistics for analysis.

### **ORGANIZATION OF FINDINGS**

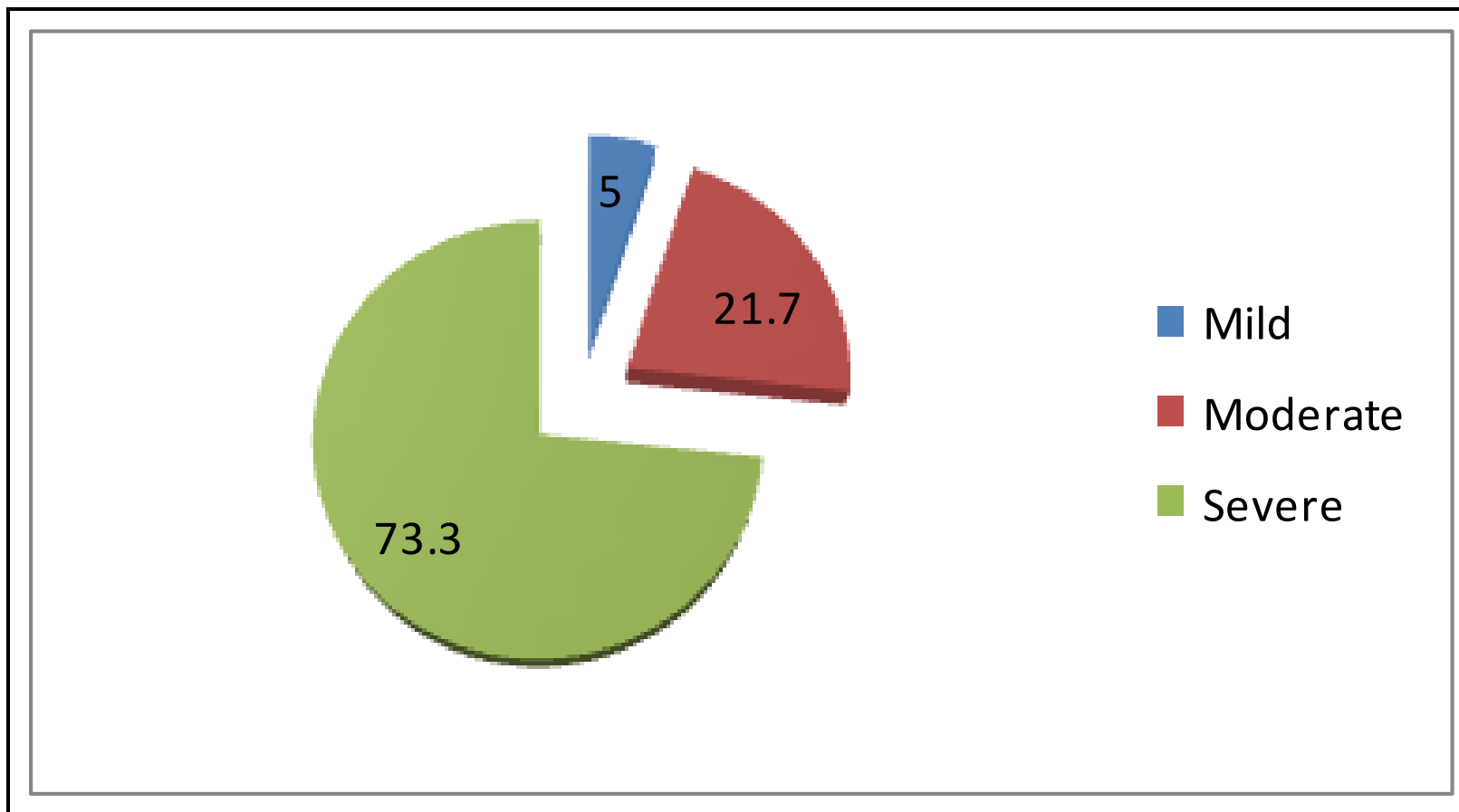
The findings of the study was organized and presented under the following headings.

- ❖ Percentage distribution of prevalence of Depression among elderly.
- ❖ Frequency and percentage distribution of demographic variables of elderly.
- ❖ Comparison between pre test and post test score on level of depression among elderly.

- ❖ Comparison of mean and standard deviation of pre test and post test score on level of depression among elderly.
- ❖ Comparison of mean and standard deviation of pre test and post test score on level of depression and Effectiveness of Pranayama among elderly.
- ❖ Association between the selected demographic variables and Post test score on the level of depression among elderly.

### **PERCENTAGE DISTRIBUTION OF PREVALENCE OF DEPRESSION AMONG ELDERLY**

Prevalence of depression among the elderly residing in the selected old age home were normal (3%), mild depression ( 21.7%), severe depression ( 73.3%) and overall as 95% . These findings indicate that depression is highly prevalent among the elderly in the selected old age home.



*Fig.3.a: Percentage Distribution of Prevalence of Depression*

**TABLE-4.1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES OF ELDERLY**

**( N=60)**

<b>Demographic Variables</b>		<b>Frequency (f)</b>	<b>Percentage (%)</b>
Age	60 - 65 YEARS	18	30.00%
	66 - 70 YEARS	14	23.33%
	71 - 75 YEARS	15	25.00%
	75 - 80 YEARS	13	21.67%
Gender	MALE	27	45.00%
	FEMALE	33	55.00%
Religion	HINDU	53	88.33%
	MUSLIM	2	3.33%
	CHRISTIAN	5	8.33%
	OTHERS	0	0.00%
Educational Status	ILLITERATE	25	41.67%
	PRIMARY	16	26.67%
	SECONDARY	6	10.00%
	HIGHER SECONDARY	10	16.67%
	GRADUATE & ABOVE	3	5.00%
Type of family	NUCLEAR	28	46.67%
	JOINT	32	53.33%
Marital Status	MARRIED	9	15.00%
	UNMARRIED	4	6.67%
	SEPERATED/DIVOECED	8	13.33%
	WIDOW/WIDOWER	39	65.00%



<b>Demographic Variables</b>		<b>Frequency (f)</b>	<b>Percentage (%)</b>
Monthly Income	BELOW RS 2000	18	30.00%
	RS 2001 - 6000	13	21.67%
	RS 6001-10000	4	6.67%
	ABOVE RS 10000	2	3.33%
	NO INCOME	23	38.33%
Source of Income	PENSIONERS	12	32.43%
	GOVT AID	19	51.35%
	PROPERTY	1	2.70%
	SAVINGS	4	10.81%
	OTHERS	1	2.70%
No of Children	NO CHILD	8	13.33%
	ONE	9	15.00%
	TWO	14	23.33%
	MORE THAN TWO	29	48.33%
Spouse is alive, whether he/she is residing in this home	YES	3	5.00%
	NO	57	95.00%
Duration of stay in old age home	1 YEAR	10	16.67%
	1-3 YEARS	27	45.00%
	4-6 YEARS	20	33.33%
	ABOVE 6 YEARS	3	5.00%

**Table 4.1** depicts the frequency and percentage distribution of personal factors of demographic variables including age, gender, religion, educational status, type of family, marital status, monthly income, source of income, number of siblings, spouse is alive whether he/she is residing in this home, duration of stay in old age home.

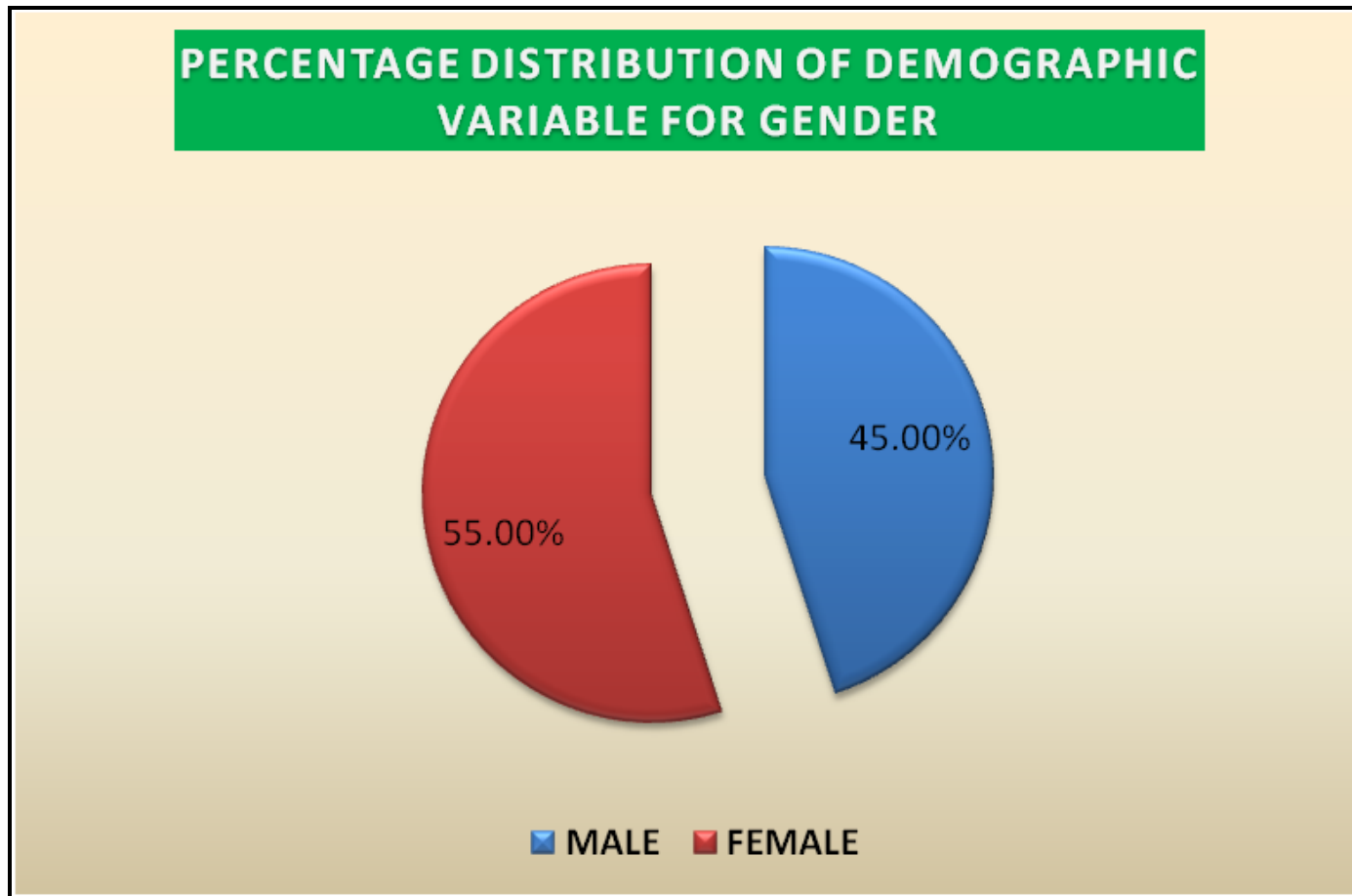
Out of 60 elderly, 18 (30 percentage) were in 60-65 years, 14 (23.33 percentage) were in 66-70 years, 15 (25 percentage) were in 71-75 years, 13 (21.67 percentage) were 76 – 80 years of age group.

Regarding gender, male 27 (45 percentage), female 33 (55 percentage). With regard to religion 53 (88.33 percentage) were hindu, 2 (3.33 percentage) were muslims, 5 (8.33 percentage) were Christians. Regarding educational status, 25 (41.67 percentage) were non literate, 16 (26.67 percentage) were primary, 6 (10 percentage) were secondary, 10 (16.67 percentage) were in higher secondary and 3 ( 5 percentage) were graduates and above.

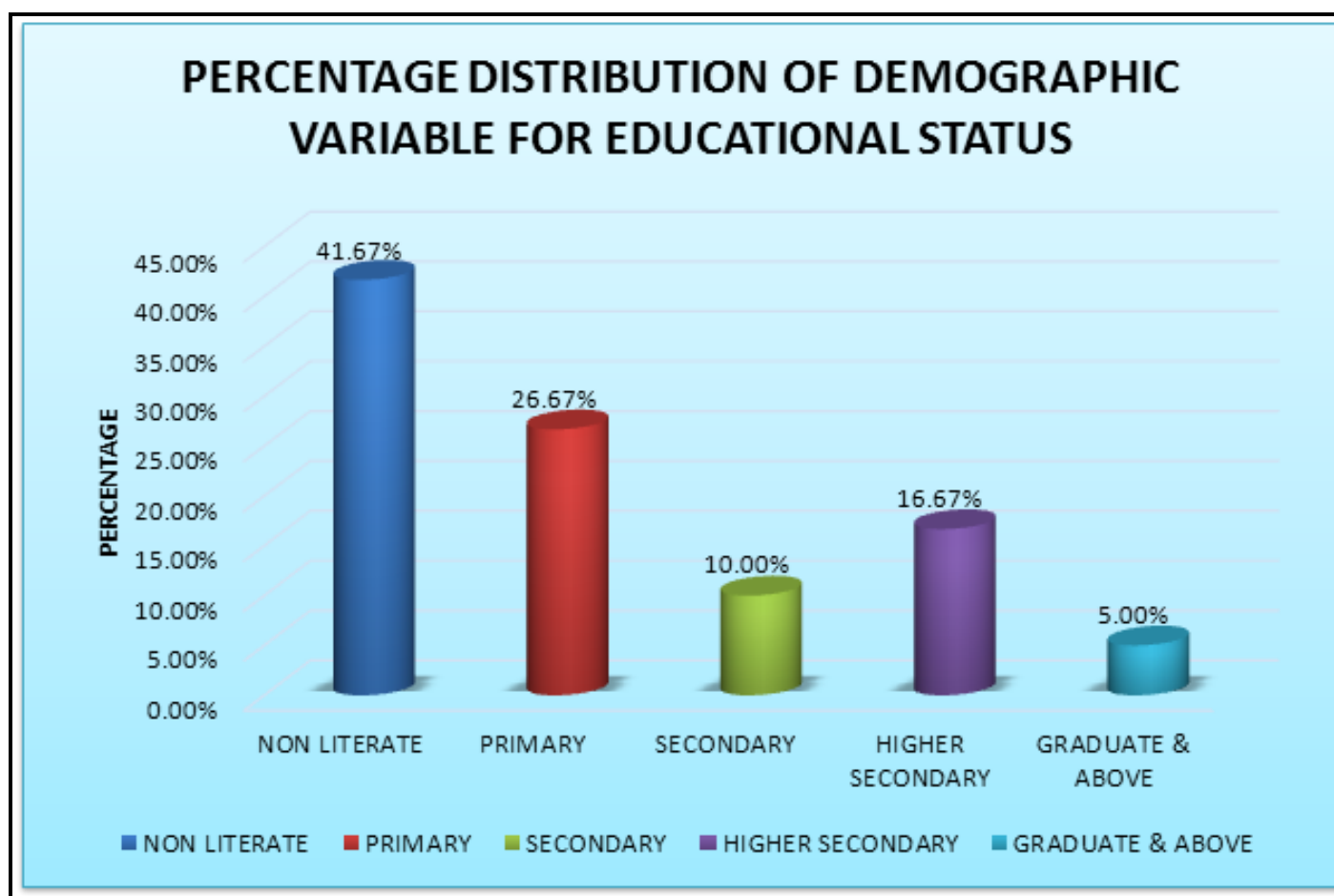
Regarding type of family, 28 (46.67 percentage) were in nuclear and 32 (53.33 percentage) were in joint family. With regard to marital status, 9 (15 percentage) were married, 4 (6.67 percentage) were unmarried, 8 (13.33 percentage) were separated/ divorced and 39 (65 percentage) were widow/widower. With regard to monthly income, 18 (30 percentage) were getting below Rs 2000, 13 (21.67 percentage) were getting Rs2001-6000, 4 (6.67 percentage) were getting Rs6001-10000, 23 (38.33 percentage) were comes under no income.

With regard source of income, pensioners are 12 (32.43 percentage), 19 (51.35 percentage) are getting help from Government Aid, 1 (2.70 percentage) are having property, 4 (10.81 percentage) are having savings, others are in 1 (2.70 percentage). Regarding number of childrens, 8 (13.33 percentage) not having child, 9 (15 percentage) are having one child, 14

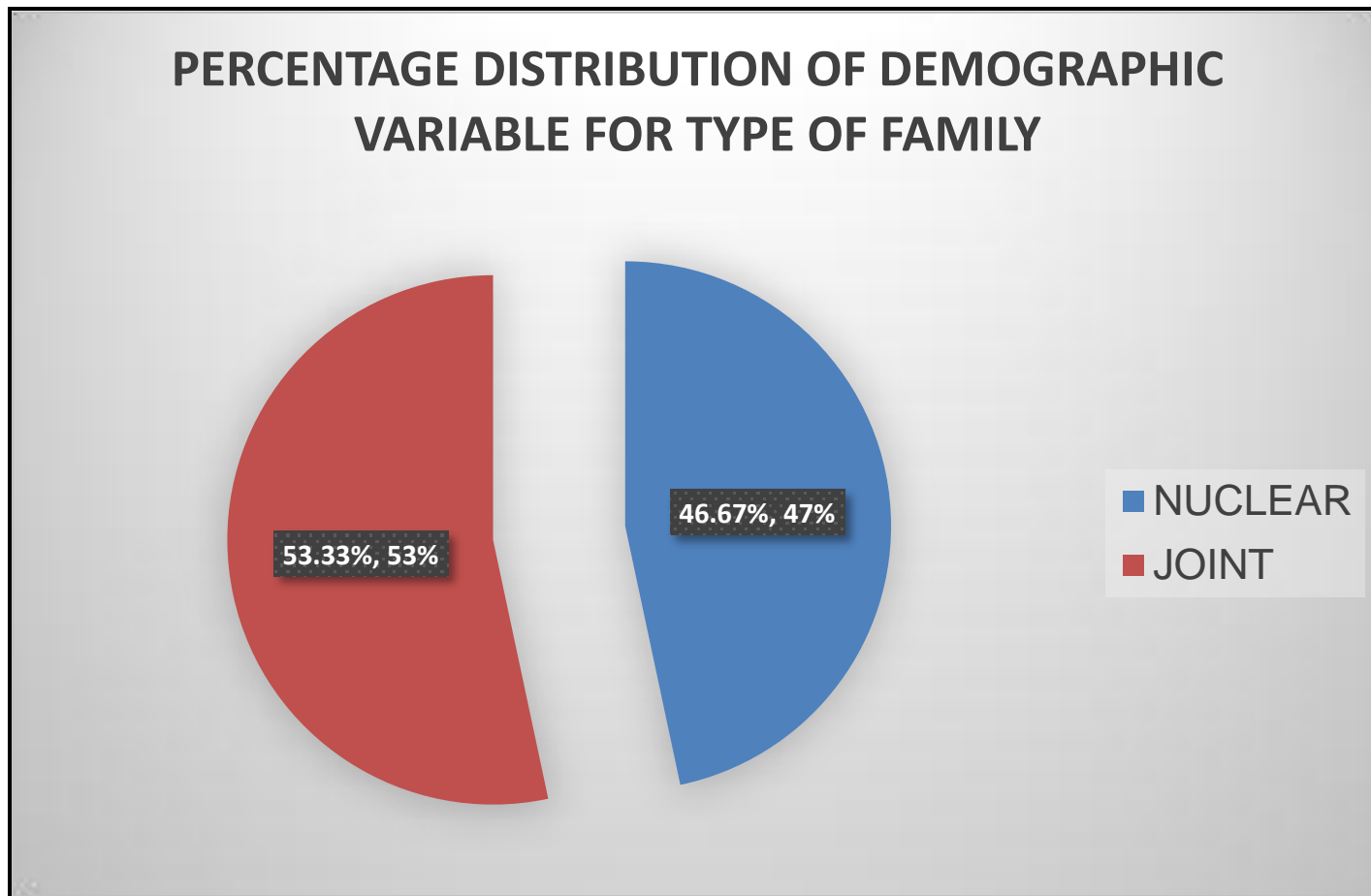
(23.33 percentage) having two children, 29 (48.33 percentage) were having more than two children. Regarding if spouse is alive, whether he/she residing in this home, 3 (5 percentage) are in yes and 57 (95 percentage) are in no category. With regard to duration of stay in old age home, 10 (16.67 percentage) were staying less than 1 year, 27 (45 percentage) were staying for 1-3 years, 20 (33.33 percentage) were for 4-6 years and 3 (5 percentage) were staying more than 6 years.



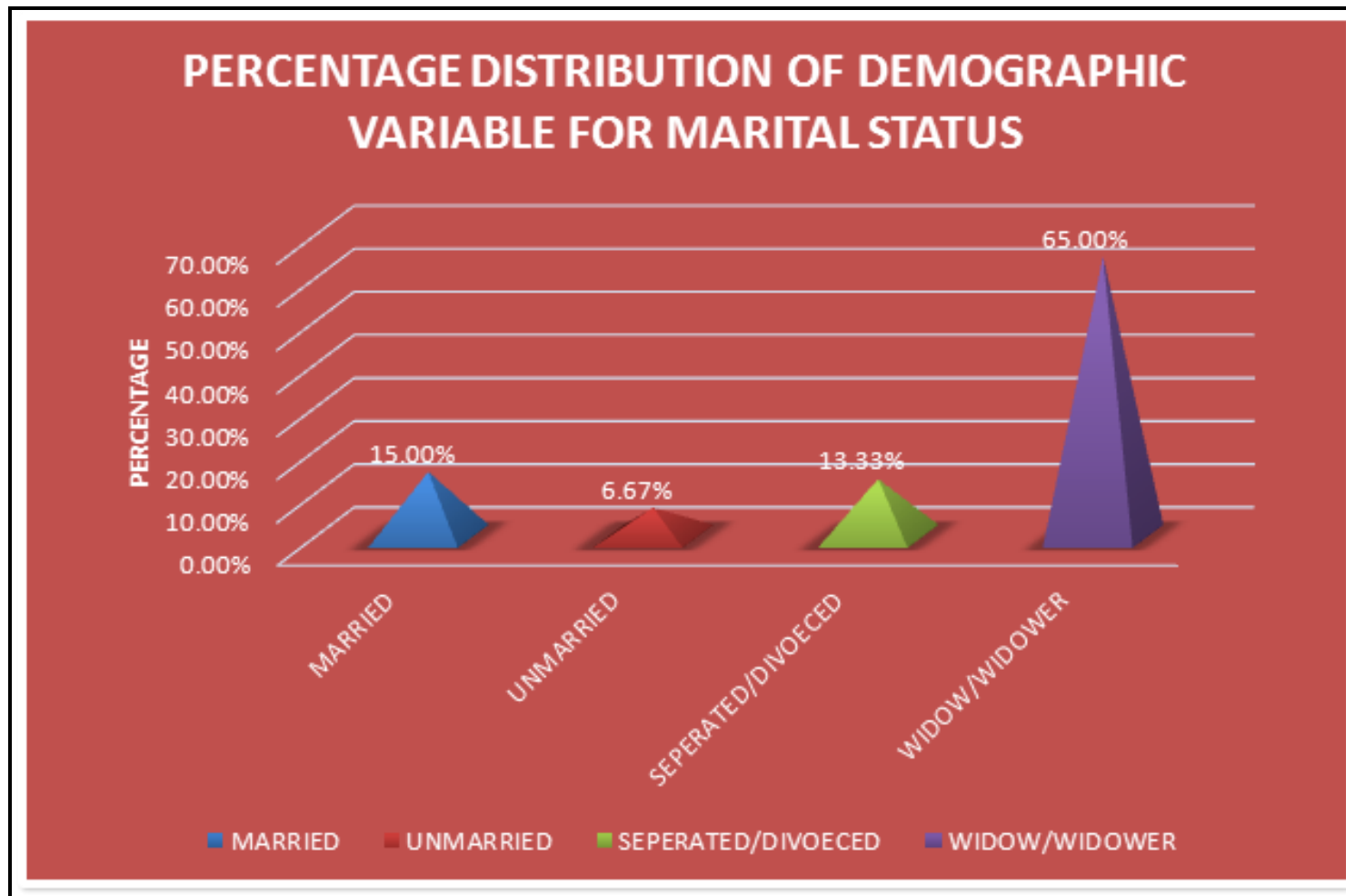
*Figure 3.c: Percentage Distribution of Demographic Variable for Gender*



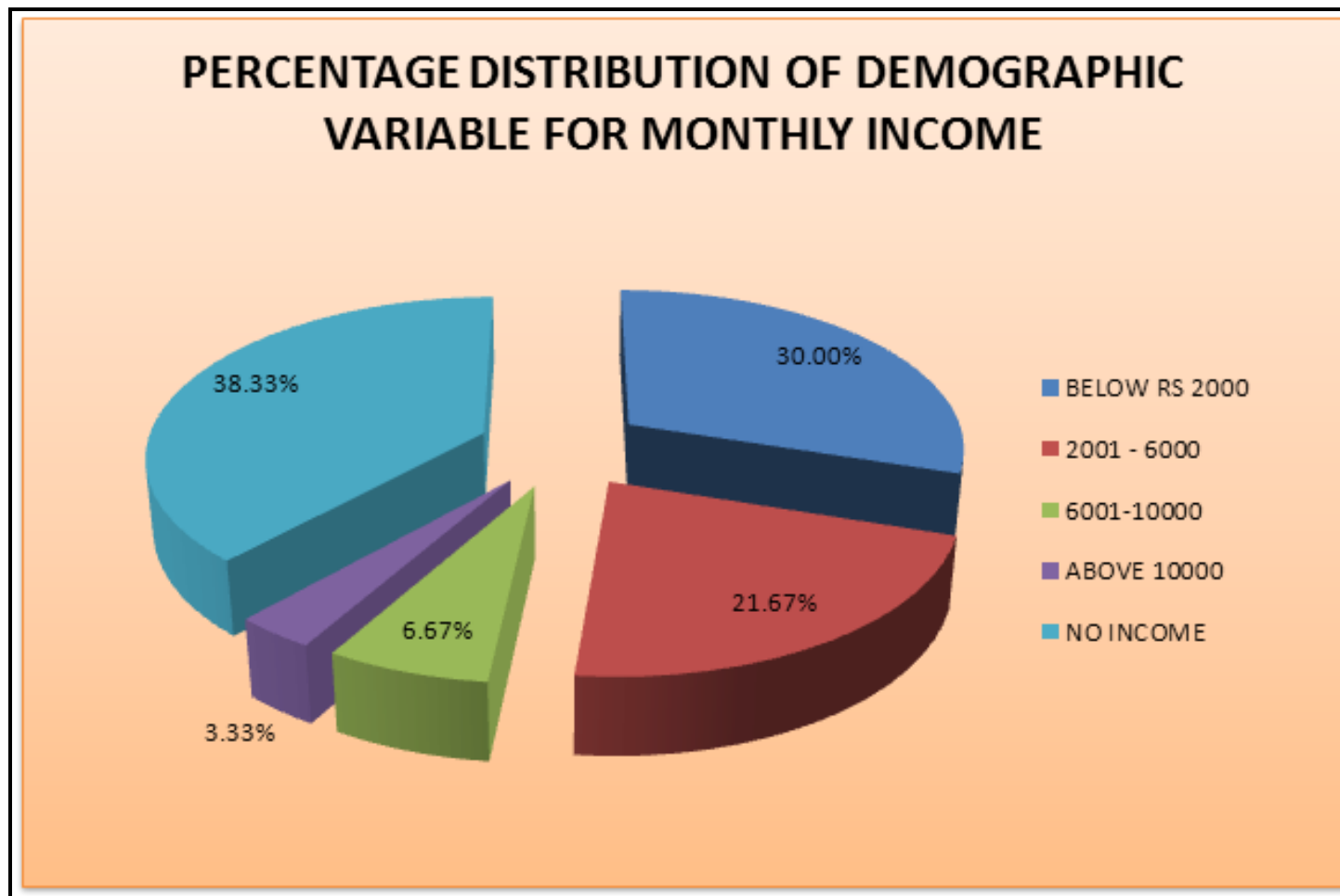
*Figure 3.d: Percentage Distribution of Demographic Variable for Educational Status*



*Figure 3.e: Percentage Distribution of Demographic Variable for Type of Family*

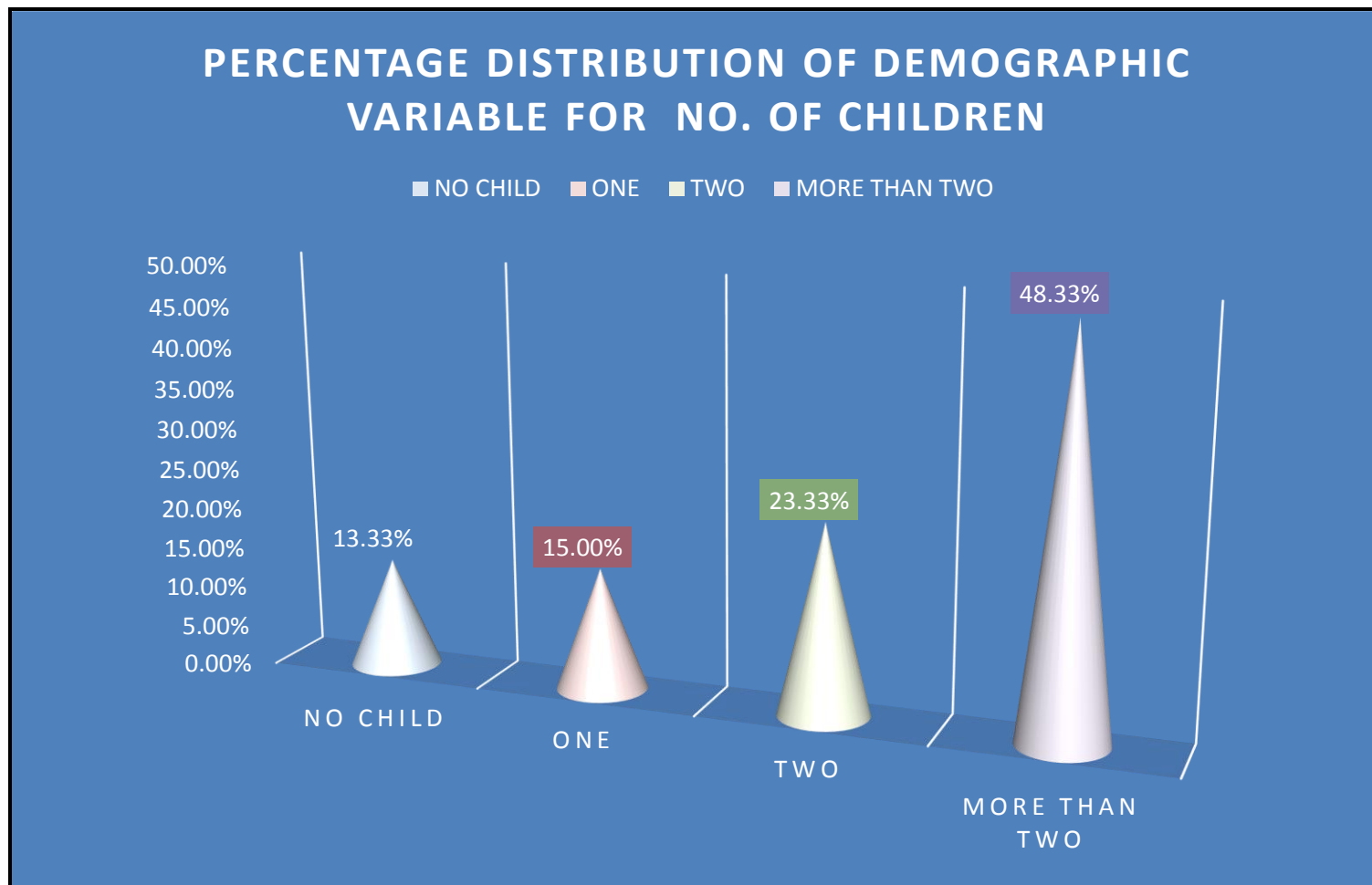


*Figure 3.f: Percentage Distribution of Demographic Variable for Marital Status*

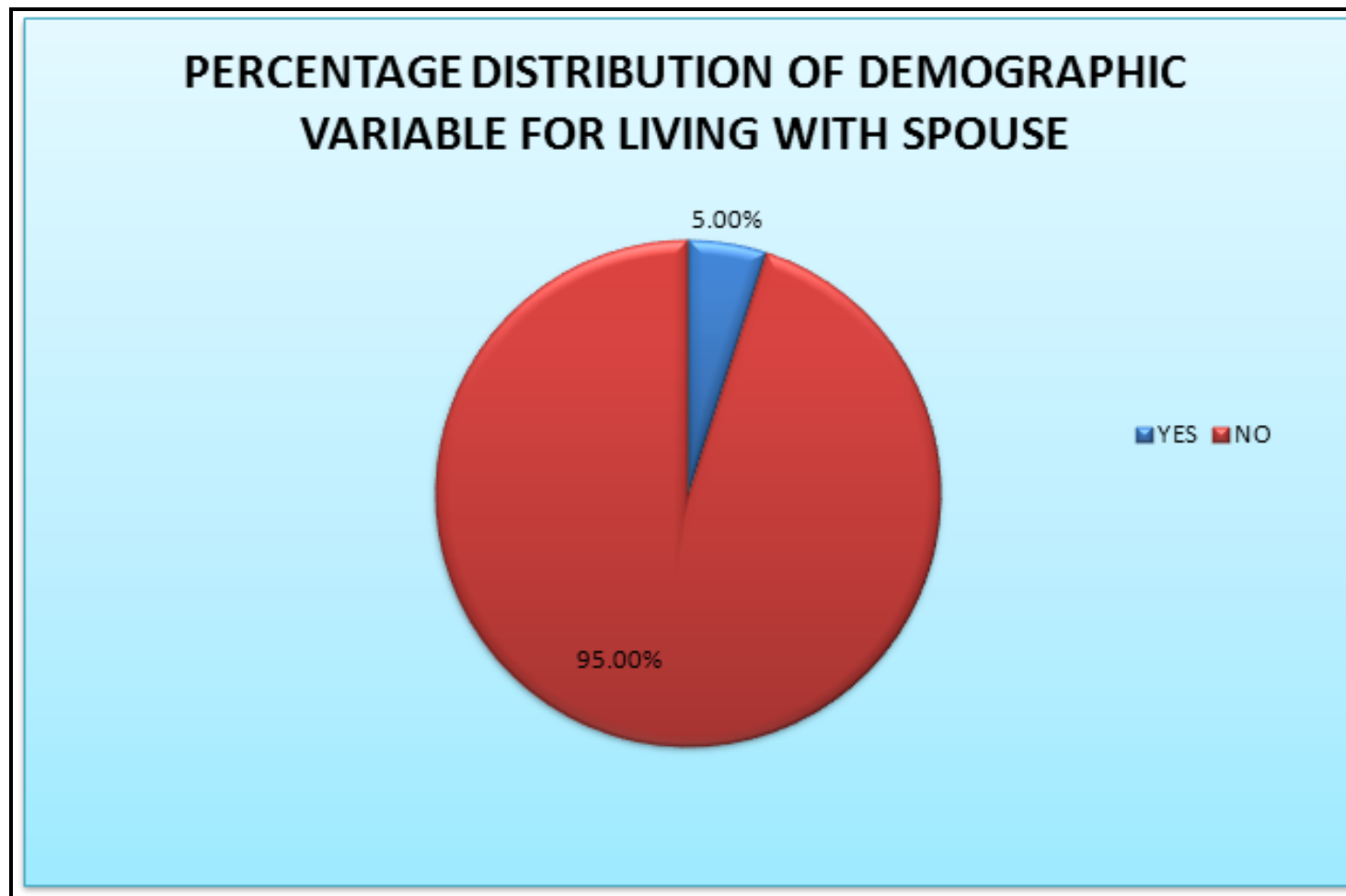


*Figure 3.g: Percentage Distribution of Demographic Variable for Monthly Income*





*Figure 3.h: Percentage distribution of demographic variable for No. of children*



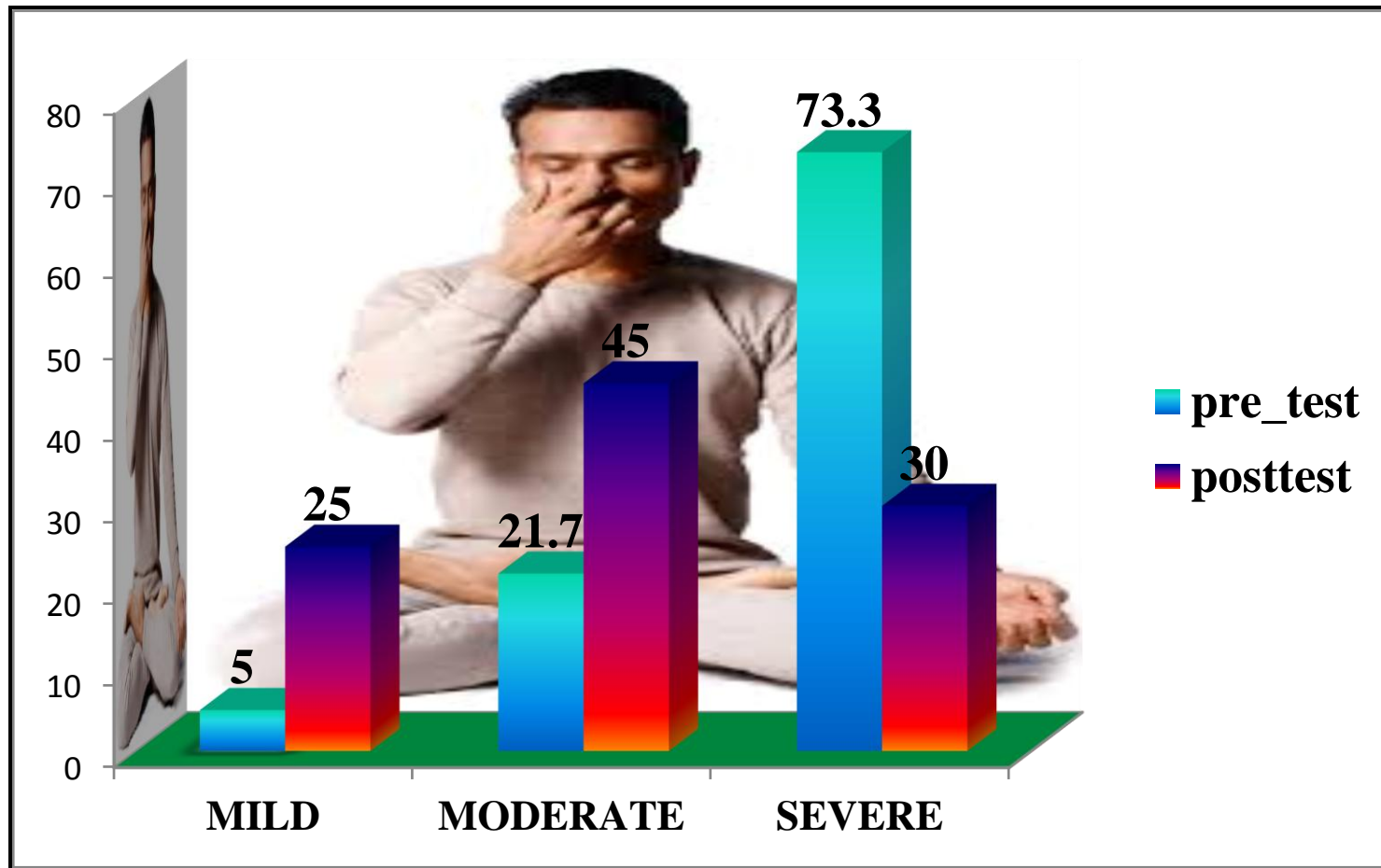
*Figure 3.i: Percentage Distribution of Demographic Variable for Living with Spouse*

**TABLE-4.2: COMPARISON BETWEEN PRE-TEST AND POST-TEST SCORE ON LEVEL OF DEPRESSION AMONG ELDERLY.**

(N=60)

Scoring Level	Pre Test		Post Test	
	Frequency(f)	Percent(%)	Frequency(f)	Percent(%)
Mild	3	5	15	25
Moderate	13	21.7	27	45
Severe	44	73.3	18	30
<b>Total</b>	<b>60</b>	<b>100</b>	<b>60</b>	<b>100</b>

The data presented in the **Table 4.2** revealed that majority of elderly had severe level of depression (73.3%) before Pranayama. However after pranayama it was mild (25%), moderate (45%) and severe (30%) level of depression.



*Figure 3.b: Comparison between pre test and post test score on level of depression among elderly.*

**TABLE 4.3: COMPARISON OF MEAN AND STANDARD DEVIATION OF PRE TEST AND POST TEST LEVEL OF DEPRESSION AMONG ELDERLY**

(N=60)

Test	Mean	Standard Deviation	Standard Error Mean
Pre test	20.8833	5.98612	0.7728
Post test	13.8333	6.87705	0.88782

The data presented in **Table 4.3** depicted that mean and standard deviation of elderly before pranayama (M= 20.88, SD= 5.98) whereas after pranayama in the mean and standard deviation (M=13.83, SD= 6.87) between the elderly people. It can be attributed to the effectiveness of pranayama on reducing depression. Hence the null hypotheses  $H_{0_1}$  was rejected

**TABLE 4.4: COMPARISON OF MEAN AND STANDARD DEVIATION OF PRE TEST AND POST TEST LEVEL OF DEPRESSION AND EFFECTIVENESS OF PRANAYAMA AMONG ELDERLY**

(N=60)

Test	Paired Differences					t
	Mean	Standard Deviation	Standard Error Mean	95% Confidence Interval of the Difference		
				Lower	Upper	
Pre-test post-test	7.05	7.08406	0.91455	5.21999	8.88001	7.709*

Significant at \*P<0.001

The data presented in **Table 4.4** reveals the improvement score of depression mean is 7.05 and standard deviation 7.08406. Since there is a significant difference between the pre-test and post-test level. Hence the Pranayama was effective on level of depression among elderly. So the null hypothesis HO1 was rejected.

**TABLE 4.5: ASSOCIATION BETWEEN THE SELECTED  
DEMOGRAPHIC VARIABLES AND POST TEST LEVEL OF  
DEPRESSION AMONG ELDERLY**

**(N=60)**

Sl. No	Demographic Variables		Post_test						Chi Square $\chi^2$	p Value
			Mild		Moderate		Severe			
			n	%	n	%	n	%		
1	Age	60 - 65 Years	4	6.67%	5	8.33%	9	15.00%	8.171	0.226 NS
		66 - 70 Years	2	3.33%	9	15.00%	3	5.00%		
		71 - 75 Years	6	10.00%	6	10.00%	3	5.00%		
		75 - 80 Years	3	5.00%	7	11.67%	3	5.00%		
2	Gender	Male	8	13.33%	11	18.33%	8	13.33%	0.621	0.733 NS
		Female	7	11.67%	16	26.67%	10	16.67%		
3	Religion	Hindu	13	21.67%	22	36.67%	18	30.00%	4.448	0.349 NS
		Muslim	1	1.67%	1	1.67%	0	0.00%		
		Christian	1	1.67%	4	6.67%	0	0.00%		
		Others	0	0.00%	0	0.00%	0	0.00%		
4	education-al status	Illiterate	6	10.00%	13	21.67%	6	10.00%	7.752	0.458 NS
		Primary	4	6.67%	7	11.67%	5	8.33%		
		Secondary	1	1.67%	1	1.67%	4	6.67%		
		Higher Secondary	2	3.33%	5	8.33%	3	5.00%		
		Graduate & Above	2	3.33%	1	1.67%	0	0.00%		
5	Type of Family	Nuclear	9	15.00%	9	15.00%	10	16.67%	3.571	0.168 NS
		Joint	6	10.00%	18	30.00%	8	13.33%		
6	Marital Status	Married	1	1.67%	4	6.67%	4	6.67%	5.694	0.458 NS
		Unmarried	2	3.33%	2	3.33%	0	0.00%		
		Seperated/ Divoeccd	2	3.33%	2	3.33%	4	6.67%		
		Widow/ Widower	10	16.67%	19	31.67%	10	16.67%		

Sl. No	Demographic Variables		Post_test						Chi Square $\chi^2$	p Value
			Mild		Moderate		Severe			
			n	%	n	%	n	%		
7	Income	Below Rs 2000	6	10.00%	8	13.33%	4	6.67%	13	0.112 NS
		Rs 2001 - 6000	0	0.00%	7	11.67%	6	10.00%		
		Rs6001-10000	2	3.33%	1	1.67%	1	1.67%		
		Above Rs10000	2	3.33%	0	0.00%	0	0.00%		
		No Income	5	8.33%	11	18.33%	7	11.67%		
8	Source of Income	Pensioners	5	13.51%	5	13.51%	2	5.41%	5.719	0.679 NS
		Govt. Aid	4	10.81%	8	21.62%	7	18.92%		
		Property	0	0.00%	1	2.70%	0	0.00%		
		Savings	1	2.70%	1	2.70%	2	5.41%		
		Others	0	0.00%	1	2.70%	0	0.00%		
9	No of children	No Child	4	6.67%	1	1.67%	3	5.00%	11.464	0.075 NS
		One	4	6.67%	4	6.67%	1	1.67%		
		Two	2	3.33%	5	8.33%	7	11.67%		
		More Than Two	5	8.33%	17	28.33%	7	11.67%		
10	Spouse is alive, whether he/she is residing in this home?	Yes	2	3.33%	1	1.67%	0	0.00%	3.236	0.198 NS
		No	13	21.67%	26	43.33%	18	30.00%		
11	Duration of stay in old age home	<1 Year	4	6.67%	3	5.00%	3	5.00%	7.948	0.242 NS
		1-3 Years	4	6.67%	11	18.33%	12	20.00%		
		4-6 Years	6	10.00%	11	18.33%	3	5.00%		
		Above 6 Years	1	1.67%	2	3.33%	0	0.00%		

\*p<0.001



It could be inferred from the **Table 4.5** that there was no significant association between the effectiveness of pranayama on the level of depression and demographic variable such as Gender, Age, Religion, Educational status, Type of family, Marital status, Monthly income, Source of income, No of children, spouse is alive and duration of stay in old age home ( $p>0.001$ ). Null Hypotheses (HO2) with regard to association between the level of depression and demographic variables was retained.

## **CHAPTER-V DISCUSSION**

A Study was conducted to assess the Effectiveness of Pranayama on the level of Depression among elderly in Indian Red Cross Society Old Age Home, Poigai.

### **OBJECTIVES OF THE STUDY**

- To find out the prevalence of depression among the elderly in selected old age home.
- To assess the Pre and Post test level of depression among elderly.
- To evaluate the effectiveness of Pranayama on Pre and Post test level of depression among elderly.
- To find out the association between selected demographic variables on the level of depression among elderly.

The study was carried out upon 60 elderly at Indian Red Cross Society Old Age Home, Poigai. The level of depression was assessed before and after pranayama using Yesavage Geriatric depression scale among elderly.

Pranayama was administered 7 days in a week in the morning before breakfast for the period of 6 weeks for 30 minutes. After 6 weeks the level of depression was assessed by using Yesavage Geriatric depression scale among elderly.

***According to the Objectives of the study:***

***Objective-1: To find out the prevalence of depression among the elderly in selected old age home.***

Prevalence of depression among the elderly residing in the selected old age home were normal (3%), mild depression ( 21.7%), severe depression ( 73.3%) and overall as 95% . These findings indicate that depression is highly prevalent among elderly in the selected old age home. It may be due to the consequences of reduced life satisfaction, social deprivation, loneliness, cognitive decline and impairment in the activities of daily living. The needs and the demands of the elderly have been increasing and they are not given much attention by the family members and relatives and they are left alone in the old age home.

**Kumar et al. (2013)** conducted a case control frame work to study the nature, prevalence and factors associated with geriatric depression in a rural south Indian community. Thousand participants aged over 65 years from Kaniyambadi block, Vellore, India. Prevalence of geriatric depression (ICD-10) within one month was found in 12.7% among low income, experiencing hunger, history of cardiac illnesses, transient ischemic attack, past head injury and diabetes, increased the risk for geriatric depression after adjusting for other determinants using conditional logistic regression Geriatric depression is prevalent in rural south India.

So due to urbanization family system are broken down into nuclear, and the elderly are left alone and uncared. Hence there is a high prevalence of depression among the elderly in the Indian Red Cross Society Old Age Home, Poigai..

***Objective-2: To assess the Pre and Post test level of depression among elderly.***

Majority of elderly had severe level of depression (73.3%) before Pranayama. However after pranayama it was mild (25%), moderate (45%) and severe (30%) level of depression. It is well established that low socio economic status is frequently associated with poor health maintenance leads to depression in late life.

**David et al. (2008)** conducted study on pranayama (Hatha yoga) for depressed patients are taking anti-depressant medications but are only in partial remission. Twenty-seven elderly women and 10 elderly men were enrolled in the study, of which 17 completed the intervention and pre-and post-intervention assessment data. All participants were diagnosed with unipolar major depression in partial remission. Significant reductions were shown for depression, anger, anxiety, neurotic symptoms and low frequency heart rate variability in the 17 completers. Moods improved from before to after the yoga classes. Yoga appears to be a promising intervention for depression; it is cost-effective and easy to implement.

Hence it is the liability of the institution and the health care professionals to implement diversity of complementary therapies in the old age homes and this information should be disseminated to the inmates to promote the overall quality of life.

***Objective-3: To evaluate the effectiveness of Pranayama on Pre and Post test level of depression among elderly.***

Mean and standard deviation of elderly before pranayama ( $M = 20.8833$ ,  $SD = 5.98612$ ) of old age people is not significant ( $p > 0.05$ ), whereas after pranayama there is significant difference in the mean and

standard deviation ( $M = 13.8333$ ,  $SD = 6.87705$ ) of elderly ( $p < 0.001$ ). It can be attributed to the effectiveness of pranayama on reducing depression.

Pranayama asserts that changing your breathing pattern can cause a feedback process. Pranayama also aids in learning self-awareness can also generate mental changes, such as increased self-acceptance, increased control over your life and a renewed outlook on pain. These mental changes can holistically improve your health and reduce symptoms of depression.

**Bhargava (1988)** conducted study on Autonomic responses to breath holding in twenty elderly. Breath was held at different phases of respiration and parameters recorded were Breath holding time, heart rate systolic and diastolic blood pressure and galvanic skin resistance (GSR). After taking initial recordings all the subjects practised Nadi-Shodhana Pranayama for a period of 4 weeks. At the end of 4 weeks same parameters were again recorded and the results compared. Baseline heart rate and blood pressure (systolic and diastolic) showed a tendency to decrease and both these autonomic parameters were significantly decreased at breaking point after pranayamic breathing. Thus pranayama breathing exercises appear to alter autonomic responses to breathe holding probably by increasing vagal tone & decreases the vagal discharge. .

The findings would have a significant impact in our sociocultural context as people from rural areas are mostly poor and lack necessary medical care and our indigenous method of pranayama is not only cheap but also effective in the treatment of various mental and physical distresses. Yoga has not only been found to be preventive in nature but also promotive as it increases the human potentials and improves the immune system of the individuals.

***Objective-4: To find out the association between selected demographic variables on the level of depression among elderly.***

Chi square test was used to find out the association between selected demographic variables and the level of depression. It was found that there was no significant association between selected variables and the level of depression among elderly respectively. From this inference the level of depression among the elderly is not influenced by the demographic variables.

There is association between the level of depression and gender. Severe depression was found more in females than males. This may be due to the fact that females are more prone to depression than men. On other hand males residing in the old age homes are not much engaged in any productive activities. Thus remaining aloof and isolated which might aggravate depression.

It was also noted that severe depression was more among elderly who are having more than two children. It may be due to fact that old age people with children may feel more depressed as they may be sacrificing their life for children as they may be satisfied with the happiness of their children. Whereas old age people without children might be depressed even before coming to the old age homes, which might be aggravated by the various factors such as lack of social support, loss of financial status, loss of spouse etc.

**Chou (2004)** conducted study Childlessness and psychological wellbeing of Chinese older adults. Cross-sectional data collected from a representative community sample of 2003 Chinese elderly people aged 60. Respondents were interviewed in face-to-face format and data including socio-demographic variables, health indicators, loneliness and depression were obtained. The impact of childlessness on psychological well-being among elderly Chinese is more robust. The effect of

childlessness on psychological well-being has to be investigated in the context of marital status. Therefore, aged care service practitioners must take this risk factor into consideration in their preventive intervention and treatment for psychological well-being.

Even though, depression is common among old age people residing in old age home. It is interesting to note that old age people residing for shorter duration is more depressed than those who were residing for more than three years. Due to the adaptation difficulties felt in old age home in the beginning. It may be due to the fact that, as the time goes on people learn to cope and adapt to environment where they live when there is no other option.

In conclusion this study has enlightened on the importance of the role of the nurses in identifying the old age depression and they can provide pranayama to promote the psychological wellbeing. The above findings give a clear direction to health care professionals that everyone must be paid equal attention with regard to depression and pranayama should be irrespective of their demographic characteristics.

## **SUMMARY**

This chapter dealt with the objectives of the study, major findings of the demographic variables of the elderly with depression, description of severity of depression level before and after administration of Pranayama, mean and standard deviation of depression level of the elderly before and after Pranayama, association between the selected demographic variables and level of depression of the elderly.

## **CHAPTER-VI**

### **SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS**

The essence of any research project lies on reporting and findings. This chapter gives a brief account of the study including conclusion drawn from the findings, recommendation, limitation of the study, suggestions for future studies and nursing implications.

#### **OBJECTIVES OF THE STUDY**

- To find out the prevalence of depression among the elderly in selected old age home.
- To assess the Pre and Post test level of depression among elderly.
- To evaluate the effectiveness of Pranayama on Pre and Post test level of depression among elderly.
- To find out the association between selected demographic variables on the level of depression among elderly.

The study was conducted in at Indian Red Cross Society Old Age Home, Poigai.

60 elderly were selected through purposive sampling technique. The depression scores were assessed before and after Pranayama. Pranayama was given for the period of six weeks, 30 minutes in a day.

#### **NULL HYPOTHESES**

Ho<sub>1</sub>: There will be no significant difference in the pre test and post test level of depression among elderly.



Ho<sub>2</sub>: There will be no significant association between the demographic variables and post test level of depression among elderly.

The conceptual frame work for this study is based on Roy Adaptation Theory. An extensive review literature and guidance by the experts formed foundations to the development of the tool. A quasi experimental research approach was used to achieve the objectives of the study.

The investigator used the Demographic variable proforma, Yesavage Geriatric Depression Scale. The data collection tools were validated and reliability was established. After the pilot study, the data for the main study was collected. The collected data was tabulated and analyzed using descriptive and inferential statistics.

## **MAJOR FINDINGS OF THE STUDY:**

### ***Prevalence of depression among elderly***

Prevalence of depression among the old age people residing in the selected old age home were mild (3%), moderate depression ( 21.7%), severe depression ( 73.3%) and overall as 95% among elderly.

### ***Demographic variables of elderly with depression***

Majority of elderly were aged between 71-75 years (25%) had duration of stay between 1-3 years in the old age homes (45%) and did not have spouse residing in the same home (95%). Most of them were females (55%), non literate (41.67%), Hindus (88.33%), Govt aid (51.35%) and belongs to joint family (53.33%). Significant percentage of them have more than two children (48.33%), with no income (38.33%) among elderly respectively.

### ***Level of depression of elderly before and after Pranayama***

Majority of elderly had severe level of depression (73.33%) before Pranayama. However after pranayama it was reduced to (30%) level of depression.

### ***Mean and the standard deviation of the level of depression of the elderly before and after Pranayama***

Mean and standard deviation of elderly before pranayama ( $M = 20.8833$ ,  $SD = 5.98612$ ) of old age people is not significant ( $p > 0.05$ ), whereas after pranayama there is significant difference in the mean and standard deviation ( $M = 13.8333$ ,  $SD = 6.87705$ ) of old age people ( $p < 0.001$ ). It can be attributed to the effectiveness of pranayama on reducing depression. Hence the null hypotheses  $H_{01}$  was rejected.

### ***Association between selected demographic variables and the level of depression among elderly***

Chi square test was used to find out the association between selected variables and the post test level of depression. There was no significant association between the level of depression and selected demographic variable such as gender, age, religion, educational status, type of family, marital status, monthly income and duration of stay in old age home ( $p > 0.001$ ). Null Hypotheses ( $H_{02}$ ) with regard to association between the level of depression and demographic variables was retained.

## **CONCLUSION**

The findings of the study revealed that being in old age home and the feeling of lonely, Physical limitations and financial constraints lack of familial support added to their distress. Pranayama is the non-pharmacological psychosocial intervention for the treatment of depression.

## **IMPLICATIONS**

Based on the findings the researcher recommended the implications on Nursing practice, Nursing administration, Nursing education, Nursing research.

## **NURSING PRACTICE**

The findings of the study revealed that the old age people living in the old age homes had depression and Pranayama is an effective treatment for depression. All health workers can use this therapy in their settings to treat old age depression in the group. Especially nurses play a vital role in caring old age people, early diagnosis of old age depression can prevent from harmful consequences. Strategies for community workers in early detection of old age depression and its management. It can create the awareness about depression of the old age people and its effective management.

## **NURSING EDUCATION**

With the emerging health care demands and newer trends in field of nursing education must focus on the innovations to enhance the nursing care. The nursing students should be taught the importance of relieving depression and enhance the quality of life of the old age people. Therefore nursing students should be introduced with the alternative methods of treating depression. Student nurses should incorporate the importance of early screening of old depression and its management. Mass health education programme can be conducted regarding awareness of old age depression. Mental health in old age must be included in the curriculum of A.N.M, G.N.M, B.Sc, PB.Sc and M.Sc Nursing Programme.

## **NURSING ADMINISTRATION**

With technological advances and ever growing challenges of health care, administrators have the responsibility to provide continuing nursing education opportunities to understand the psycho social intervention including Pranayama.

This enables the nurses to update the knowledge and to render the cost effective care to the public. The nurse administrators can train the nurses to identify old age depressive symptoms, and to give counseling and teaching regarding management of old age depression. Must periodically organize formal training programme for old age people with depression management.

## **NURSING RESEARCH**

The professionals and the students can conduct further studies on depression through various other interventions to promote psychological well being in the old age homes. There is in need of extensive research in this area. Nurse researcher should challenge to perform scientific work and take part in assessment, applications, evaluation for old age people with depression. Researchers must focus on old age mental health on various aspects and develop appropriate tools for screening and risk assessments of old age depression for psychological problems and preventive interventions. It opens the large avenue for research. Since Pranayama is a holistic approach it can be used in all areas and among all age groups.

## **RECOMMENDATIONS**

- ❖ The study can be conducted on a large sample to generalize the results.
- ❖ The study can be conducted in the other settings like the community and the hospitals.
- ❖ Longitudinal study can be conducted for long term effects of Pranayama on depression.
- ❖ A study can be conducted on quality of life among old age people.
- ❖ Study can be conducted to assess the various other psychological problems in old age people.
- ❖ Experimental study can be conducted with various preventive interventions on prevention of old age depression.

## **BIBLIOGRAPHY**

### **BOOKS:**

**Annette. G. (1996) Gerontological Nursing**, 2nd Edition, Philadelphia: Mosby year book publication, 193-195.

**Azech, P. (1994).** Depression measures by sources of stress, **Applied gerontology**, 5 (4), 196-218.

**Baldwin, R. (2008).** **An oxford textbook of old age psychiatry**, 5<sup>th</sup> edition. Newyork, Oxford University press, 529-556.

**Cary. S. (1985).** **Ageing and Health**, 1<sup>st</sup> Edition, Addison Wesley publishing company, 1-10.

**Carnival. D. L. (1993).** **Nursing management for the elderly**, 3<sup>rd</sup> Edition, USA: Lippincott (p) Ltd., 50-72.

**Dr. Balayogi B. A. (2003).** **A yogic approach to Depression**, 1<sup>st</sup> Edition, Pondicherry: Kalaimamani yogacharini publication, 207-240.

**Dr. Nagendra B. A. (1994).** **New perspective in Depression Management**, 3<sup>rd</sup> Edition, Bangalore: Vivekananda Kendra publication, 403-452.

**Dougall, M. et al. (2007).**Prevalence of Depression in older people in England and wales, **psychological medicine**, 37(12), 1787-1795.

**Duttie and Katy. (1988).** **Practice of Geriatrics**, 2<sup>nd</sup> Edition, Philadelphia: W.B. Saunder company, 23-28.

**Field, T. (2010).**Complementary Therapies in Clinical Practice,  
**Book of complementary medicine**, 12 (2), 151-160.

**Hope, R. (2001).** National Service framework for older people.**Indian Academy ofApplied psychology**, 42 (3), 142–188.

**Hungler P. (1999).** **Nursing research and methods**, 3<sup>rd</sup> Edition,  
Philadelphia: Lippincott Co., 420-490.

**Jare. E. (1987).** **Elderly care**, 3<sup>rd</sup> Edition, London: Macmillan  
publication, 12-28.

**Jessica, L. (2009).** Depression as a Risk factor of prodromal for  
Dementia **psychological Ageing**, 24(2), 373 – 384.

**Kockler, R. & Hewn.P. (2002).**Gender Differences in Depressive  
clients, **geriatricpsychiatry**3 (1) 132 – 148.

**Luekenotte. A.G. (1995).** **Gerentologic Nursing**, 1<sup>st</sup> Edition,  
USA: Mosby publication, 240-259.

**Lugge A.S (1996).** **Core Curriculum for Gerentological  
Nursing**, 1<sup>st</sup> Edition, USA: Mosby publication, 170-230.

**Mahajan, B.K.(2010).** **Methods in Bio-Statistics**. (7<sup>th</sup> edition)  
St.Louis: Jaypee Brothers Medical Publishers.

**Park J.E (1997).** **Preventive and Social Medicine**, 14<sup>th</sup> Edition,  
Bangalore Vivekananda kendre publication, 403-452.

**Pilkington, K. et al. (2006).** **Complementary medicine for  
depression**, volume 6, 1741-1751.

**Polit, D.F & Beck, C.T. (2008).**Nursing Research generating and assessing evidence for nursing practice, 8<sup>th</sup>ed. New Delhi Lippincott Williams and Wilkins.

**Redfern S.J (1991).** Nursing elderly people, 2<sup>nd</sup> Edition, London: Churchill Livingstone, 140-179.

**Sandra, C. et al. (2002).** Brain morphological abnormalities in geriatric depression **Medical physiology**, 57(5), 56-66.

**Sivananda R.S (1993).** Hatha yoga, 1<sup>st</sup> Edition, Bombay: Ashwin publication, 490-523.

**Townsend M. (1996).** Psychiatric Mental Health Nursing, 2<sup>nd</sup> Edition, Philadelphia: Davis. Co. 245-284.

## **JOURNAL**

**Acharya, B. (2010).** Effect of pranayama on lipid profile. **International Journal of Yoga**, 3 (2), 70-78.

**Alex, J. (2005).** Prognosis of Depression in old age compared to middle age. **American Journal Psychiatry**, 13 (3), 1588 – 1601.

**Avnish, K. et al. (2008).** Effect of pranayama in Diabetes Mellitus. **Journal of complementary & Integrative medicine**, 5 (1), 115-133.

**Brown, R.P. (2005).** Yogic breathing in the Treatment of stress, anxiety & Depression. **Journal of alternative and complementary medicine**, 11 (1), 189 – 201.



**Chou, K.L. (2004).** Childlessness and psychological well-being in Chinese older adults.**American Journal of Psychiatry** 19(5), 449-457.

**Coen, M. (2003).** Age & Ageing Relationship between changes in depressive symptoms.**International Medical Journal**, Volume 4, page 356 – 368.

**Clemet, J.P. (2004).** Depression in the elderly patient.**American Journal of Psychiatry**, 54 (7), 725-733.

**David, P. et al. (2008).** Yoga as a complementary treatment of Depression.**Journal of Indian academy of applied psychology**, 4 (4), 493-502.

**Edmond, C. et al. (2008).** Diagnosing Depression in Alzheimer Disease, **American Journal of Geriatric Psychiatry**, 16 (3) 469-477.

**Fasey, C.N. (2009).** Grief in old age.**International journal of geriatric psychiatry**, 5(2), 67-75.

**Fiske, A. (2009).** Depression in older Adults. **Journal of Clinical Psychology**, 5(2), 363-389.

**Fried, B. et al. (2005).** Depression & Suicidal behaviors in medicare primary care patients. **Journal of general internal medicine**, 20(4), 397-403.

**Gerald, P. et al. (2011).** Late life depressive symptoms, **British Journal of Psychiatry**, 43 (4), 30-35.

**Grahara, M. (2011).**Effects of Hatha Yoga on the shaping of Anterio posterior curvature of the spine, **Human movement Journal** 12 (3), 259-263.

**Grimby, A. (2005).** Health related quality of life in old age. **British journal of psychiatry**, 9 (5), 510-515.

**Hoover, R. (2010).** Depression in the first year of stay for elderly long-term nursing home residents.**Journal of Geriatric Psychiatry**, 22(7), 1161-1171.

**Janakiamiah, K. et al. (2000).** Antidepressant efficiency of pranayama in melancholia,**Journal of Affective disorders** 57 (3), 255 – 259.

**Jeffrey, C. et al. (2009).** One year outcomes of mind & syndromal depression in older primary care pts, **Journal on Psychogeriatrics**, 21 (1) pg 60-68.

**Kumar, R. et al. (2010).** Anuloma – Viloma pranayama & Anxiety & depression among the aged. **Journal of the Indian Academy of Applied psychology**, 36( 1), 159-164.

**Lahti, J.(2011).** Changes in Leisure Time Physical Activity after transition to retirement,**International Journal of Behavioural Nutritional physiology**, 8, 36-44.

## **NET REFERENCE**

**Coen, M. (2003).** Age & Ageing Relationship between changes in depressive symptoms. *International Medical Journal*, Volume 4, page 356 – 368. Retrieved on Dec 5, 2011 from. **<http://www.cochrane.org>**.

**Hope, R. (2001).** National Service framework for older people. Indian Academy of Applied psychology, 42 (3), 142–188. Retrieved on 25<sup>th</sup> Oct' 2011 from **<http://www.ncbi.nlm/pubmed>**.

**Pilkington, K. et al. (2006).** Complementary medicine for depression, volume 6, 1741-1751. Retrieved on 7<sup>th</sup> Sep' 2011 from **<http://www.cochrane.org>**.

**Prince, V. et al. (2000).** Cross-sectional association between handicap and late life depression. British Journal of Psychiatry, 201, 506-535. Retrieved on 25<sup>th</sup> Oct' 2011 from **<http://www.ncbi.nlm/pubmed>**.

**World health report. (2004).** Mental Health, New Understanding New Hoper, 21, 16-18. Retrieved on 8<sup>th</sup> Jan 2012 from **<http://www.WHO.Org>**.

## Annexure-I



# ARUN COLLEGE OF NURSING

(A unit of Arun Educational Trust)

Affiliated with The Tamilnadu Dr. M.G.R. Medical University,  
Tamilnadu Nursing Council & Indian Nursing Council, G.O.M.S. 369/16.11.2008.

No.15, Thiagarajapuram, Vellore - 1.

**Mr. L.Adhimoolam**

**Managing Director**

**Principal**

**Ref. No.** From,

**Date :** .....

S. Sheela,

M.Sc (N) II year,

Arun College of Nursing,

Vellore-1.

To,

The secretary,

Red cross society,

Vellore-1.

Respected sir/madam,

Subject: Request for permission to conduct research in your esteemed institution.

I am a post graduate student of Arun College of nursing. I have selected the below mentioned topic for research to be submitted to the Tamilnadu M.G.R medical university, Chennai as a partial fulfillment of Nursing degree.

**“Effectiveness of Pranayama on the level of depression among elderly in Selected old age home at Vellore”.**

With regards I kindly request you to grant me permission to carry on my research study in your reputed institution. I assure my study would not harm any of the clients in your institution would be thankful for your great help.

Thanking you

*[Signature]*  
Chairman  
Old Age Home & Orphanage Home,  
Poigai, Indian Red Cross Society,  
Vellore District Branch,  
Vellore - 632 004.

*[Signature]*  
**PRINCIPAL**  
**ARUN COLLEGE OF NURSING**  
**No 15, THIYAGARAJAPURAM**  
**VELLORE - 632 001**

Ph : 0416 - 2222081 E-mail : principalaruncollege@gmail.com

## Annexure-II



### Seeking permission to use GDS

[Inbox](#)

**Sheela Wesley**

Wed, Oct 30 12, 2013 at 6:22 PM

<sheelawesley10@gmail.com>

To: yesavage@stanford.edu

[Reply](#) | [Reply to all](#) | [Forward](#) | [Print](#) | [Delete](#) | [Show original](#)

Respected sir,

I am a M.Sc Nursing IIInd year student of Arun College of Nursing, Vellore, India. I kindly request you to give me your permission to use the GDS ( Geriatric Depression Scale) for my thesis " A study to assess the effectiveness of pranayama on depression among elderly in selected old age home at Vellore, India.

Thanking you,

Yours sincerely,

S.Sheela

M. Sc Nursing II year

Arun college of Nursing

Vellore, India



Thurs, Oct 31, 2014 at 7:56 PM

**Jerome Yesavage**

<yesavage@stanford.edu>

To: sheela wesley <sheelawesley10@gmail.com>

[Reply](#) | [Reply to all](#) | [Forward](#) | [Print](#) | [Delete](#) | [Show original](#)

**OK, scale is public. Good Luck**

**From:** sheela wesley [mailto:[sheelawesley10@gmail.com](mailto:sheelawesley10@gmail.com)]

**Sent:** Wednesday, March 12, 2014 5:53 AM

**To:** [yesavage@stanford.edu](mailto:yesavage@stanford.edu)

**Subject:** Seeking permission to use GDS

### **Annexure-III**

#### **REQUEST FOR CONTENT VALIDITY**

#### **LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH**

**From**

**Ms. Sheela.S,**  
M.Sc., (Nursing) II year,  
Arun College of Nursing,  
Vellore.

**To**

**Through Proper Channel**  
**Mrs J Sunita Priyadarshini,**  
Principal,  
Arun College of Nursing.

**Sub: Request for opinions and suggestions of expert for  
establishing content validity of respected tool.**

**Respected Madam,**

Greetings! As a part of the Curriculum Requirement the following research title is selected for the study.

**Effectiveness of Pranayama on the level of Depression  
among elderly in selected old age home, Vellore**

I will be highly privileged to have your valuable suggestions with regard to the establishment of content validity of Research tool. So I request you to validate my Research tool and give suggestions about the tool.

Thanking you,

Yours Sincerely,  
**(Ms. Sheela.S)**

Place:

Date:

  
**PRINCIPAL**  
**ARUN COLLEGE OF NURSING**  
**No 15, THIYAGARAJAPURAM**  
**VELLORE - 632 001**

**Annexure-IV (a)**

**CONTENT VALIDITY CERTIFICATE**

I hereby certify that I have validated the research tool of **Ms.Sheela.S, M.Sc (N).**, Student of Arun College of Nursing, Vellore who is undertaing research study on **Effectiveness of Pranayama on the level of Depression among elderly in selected old age home, Vellore.**

**Signature of Expert**

*S. Kansal*

(S. KANSAL MAHARIBA)

ASST. PROF in Mental Health Nursing



## Annexure-IV (b)

### CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the research tool of Ms. Sheela.S, M.Sc.(Nursing) student of Arun College of Nursing, Vellore who is undertaking research study on **“Effectiveness of Pranayama on the level of Depression among elderly in selected old age home, Vellore”**.



Signature of the Expert

Dr. SHANTHI NAMBI, M.D. (Psy.), F.I.P.S.  
Regd. No. 38029  
Professor of Psychiatry  
Madras Medical College, Chennai-3.  
child and  
Institute Mental Health, Chennai-10



## **Annexure-V**

### **RESEARCH PARTICIPANT CONSENT FORM**

Dear participant,

I am a M.Sc., Nursing student of Arun College of Nursing, Vellore. As part of my study, a research on “**Effectiveness of Pranayama on the level of Depression among elderly in selected old age home**”. The findings of the study will be helpful in reducing the depression for oldage people with depression.

I hereby seek your consent and co-operation to participate in the study. Please be frank and honest in your responses. The information collected will be kept confidential and anonymity will be maintained.

**Signature of the researcher**

I ..... Hereby consent to participate and undergo the study

**Signature of the Participant**

Place:

Date:

Annexure-VI

# CERTIFICATE

This is to certify that Mrs. **SHEELA.S** successfully completed  
10 days (10.05.2013 to 20.05.2013) theory and practical training  
in Pranayama.

Place : Gudiyattam  
Date : 23.06.2013

Dr. P. MOKESH KOMAR, M.Sc., N.D.Y.D.  
PREKSHA YOGA AND NATURE CURE CENTRE,  
Thangam Nagar, (First Right Cross)  
Shri Sai Nagar, GUDIYATTAM - 632 602.  
Cell: 98948 39988

**PREKSHA YOGA AND  
NATURE CARE CENTRE**

Annexure-VII

**CERTIFICATE FOR TAMIL EDITING**

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that the dissertation, **“Effectiveness of pranayama on the level of depression among elderly in selected old age home.”** done by **Ms. Sheela S**, M.Sc. (N) IInd Year Student, of Arun College of Nursing, Vellore District has been edited by me and the use of Tamil in this study is found appropriate.

**Signature with designation**

Place :

Date :

## Annexure-VIII

### DEMOGRAPHIC VARIABLE PROFORMA OF ELDERLY

#### *Purpose*

This Proforma is used to measure the demographic variables of the elderly such as age, sex, marital status, education, occupation, religion, source of income type of the family, duration stay in old age home.,

#### *Instruction*

Please put a tick mark (✓) in the following options. Please be frank in answering.

Identification data:

Sample no:

1) Age in years

1.1 60-65 years

☐

1.2 66-70 years

☐

1.3 71-75 years

☐

1.4 76-80 years

☐

2) Gender

2.1 Male

☐

2.2 Female

☐

3) Religion

3.1 Hindu

☐

3.2 Muslim

☐

3.3 Christian

☐

3.4 Others (specify)

☐

4)	Education status	<input type="text"/>
	4.1. Illiterate	<input type="text"/>
	4.2. Primary education	<input type="text"/>
	4.3. Secondary education	<input type="text"/>
	4.4. Higher Secondary	<input type="text"/>
	4.5. Graduate & above	<input type="text"/>
5)	Type of the family	<input type="text"/>
	5.1. Nuclear	<input type="text"/>
	5.2. Joint	
6)	Marital status	<input type="text"/>
	6.1. Married	<input type="text"/>
	6.2. Unmarried	<input type="text"/>
	6.3. Separated/divorced.	<input type="text"/>
	6.4. Widow/Widower	
7)	Monthly Income	<input type="text"/>
	7.1 Rs1000-2000	<input type="text"/>
	7.2 Rs2001-6000	<input type="text"/>
	7.3Rs 6001-10000	<input type="text"/>
	7.4 >Rs10000	<input type="text"/>
	7.5 Nil	

- 8) Source of income
- 8.1. Pensioners ☐
- 8.2. Govt aid. ☐
- 8.3. Property ☐
- 8.4. Savings ☐
- 8.5. Others [specify] ☐
- 9) Number of children
- 9.1. No children ☐
- 9.2. One ☐
- 9.3. Two ☐
- 9.4. More than two ☐
- 10) If spouse is alive, whether he/she is residing in this home.
- 10.1. Yes ☐
- 10.2. No ☐
- 11) Duration of stay in the old age home
- 11.1. 1 year ☐
- 11.2. 2 - 3 years ☐
- 11.3. 4 - 6 years ☐
- 11.4. > 6 years ☐

## **Annexure-IX**

### **YESAVAGE GERIATRIC DEPRESSION SCALE**

#### ***Purpose***

This tool consist of 30 Yes/No questions to assess the level of depression among the geriatrics.

<b>S.No</b>	<b>Question</b>	<b>Yes/ No</b>	<b>Score</b>
1	Are you basically satisfied with your life?		
2	Have you dropped many of your activities and interests?		
3	Do you feel that your life is empty?		
4	Do you often get bored?		
5	Are you hopeful about the future?		
6	Are you bothered by thoughts you cannot get out of your head?		
7	Are you in good spirits most of the time?		
8	Are you afraid that something bad is going to happen to you?		
9	Do you feel happy most of the time?		
10	Do you often feel helpless?		
11	Do you often get restless and fidgety?		
12	Do you prefer to stay at home, rather than going out and doing new things?		
13	Do you frequently worry about the future?		
14	Do you feel you have more problems with memory than most?		

S.No	Question	Yes/ No	Score
15	Do you think it is wonderful to be alive now?		
16	Do you feel downhearted and blue?		
17	Do you feel pretty worthless the way you are now?		
18	Do you worry a lot about the past?		
19	Do you find life very exciting?		
20	Is it hard for you to get started on new projects?		
21	Do you feel full of energy?		
22	Do you feel that your situation is hopeless?		
23	Do you think that most people are better off than you are?		
24	Do you frequently get upset over the little things?		
25	Do you feel frequently feel like crying?		
26	Do you have trouble concentrating?		
27	Do you enjoy getting up in the morning?		
28	Do you prefer to avoid social gatherings?		
29	Is it easy for you to make decisions?		
30	Is your mind as clear as it used to be?		



## **Annexure-X**

### **SCORING KEY:**

If Q 1, 5,7,9,15,19,21,27,29 and 30 has “No” response count one for each and for the rest if response is ‘Yes” count one. Add the two scores and interpret:

- Mild depression 0-10,
- Moderate depression 11-17,
- Severe depression >17.

## **Annexure-XI**

### **BLUE PRINT FOR GERIATRIC DEPRESSION SCALE**

<b>S.No</b>	<b>Content</b>	<b>Items</b>	<b>Total</b>	<b>Percentage</b>
1.	Positive Response Questions	1,5,7,9,15,19, 21,27,29,30	10	33.3%
2.	Negative Response Questions	2,3,4,6,8,10,11,12,13,14, 16,17,18,20,22,23,24,25,26	20	66.6%

## **Annexure-XIII**

### **DATA CODE SHEET**

#### **DEMOGRAPHIC VARIABLE PROFORMA OF ELDERLY PEOPLE**

##### **SN-Sample Number**

##### **1.AGE- Age in years**

1.1 60- 64

1.2 66- 69

1.3 70-75

1.4 76

##### **2.GEN- Gender**

2.1 male

2.2 female

##### **3. REL- Religion**

3.1 Hindu

3.2 Muslim 3.3 Christin

3.4 Any other (specify)

##### **4.EDU-Education**

4.1 Non literate

4.2 Primary education

4.3 Secondary Education

4.4 Graduate & above

##### **5.TOF – Type of the family**

5.1 Nuclear

5.2 Joint

##### **6.MAR St – Marital Status**

6.1 Married

6.2 Unmarried

6.3 Separated/divorced

## **7. MI-Monthly income**

- 7.1 nil
- 7.2  $\leq 2000$
- 7.3 2001-6000
- 7.4 6001-10,000
- 7.5  $\geq 10,000$

## **8. SOI – Source of income**

- 8.1 Pensioners
- 8.2 Govt aid.
- 8.3 Property
- 8.4 Savings
- 8.5 Others [specify].....

## **9. NOC – Number of children**

- 9.1 No children
- 9.2 One
- 9.3 Two
- 9.4 More than two

## **10. SRH-If spouse is alive, whether he/she is residing in this home**

- 10.1 Yes
- 10.2 No

## **11. DSO-Duration of stay in the old age home**

- 11.0  $\leq 1$  year
- 11.2 2-3 years
- 11.3 4-6 years
- 11.4  $> 6$  years

Annexure-XII

*Lesson Plan on*

# **PRANAYAMA**

**Mrs.S.SHEELA**  
**M.Sc (N) II Year**

## **LESSON PLAN ON PRANAYAMA**

<b>TOPIC</b>	- PRANAYAMA
<b>GROUP</b>	- ELDERLY
<b>PLACE</b>	- OLD AGE HOME
<b>DURATION</b>	- 6 WEEKS
<b>METHOD OF TEACHING</b>	- LECTURE CUM DISCUSSION
<b>MEDIA OF TEACHING</b>	- DEMONSTRATION
<b>EDUCATOR</b>	- II YEAR MSC (N) STUDENT, ARUN COLLEGE OF NURSING, VELLORE
<b>AV AIDS</b>	- Posters, Pamphlets

### **General Objective**

The old age people will gain adequate knowledge on pranayama develop desirable attitude towards building competencies to achieve the personal mastery.

### **Specific Objectives: At the end of the session study participants are able to**

- know about pranayama.
- explain the meaning of pranayama.
- highlight the importance of pranayama
- enumerate the advantages of pranayama.
- know the pre requisites of pranayama
- explain on the techniques of pranayama
- enumerate on the benefits of pranayama
- know the effects of pranayama on depression

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS /LEARNERS ACTIVITY	A.V AIDS	EVALUATION
5min	To Know about pranayama.	<p><b>Pranayama:</b></p> <p>Pranayama is an aspect of Yoga that deals with breathing. Pranayama is a method of controlling prana or life force through the regulation of breathing. It is the breathing process or the control of the motion of inhalation, exhalation and the retention of vital energy.</p> <p>(Swami Ramdev's)</p>	Lecture cum discussion	-	What did you understand regarding pranayama?
3min	To explain the meaning of pranayama.	<p><b>Meaning of Pranayama:</b></p> <p>'Pranayama' literally means 'to expand Prana' (vital force). Pranayama is a process in which respiration is interrupted and Prana, that is, the vital force is controlled and regulated. The purpose of Pranayama is to inspire, motivate, regulate and balance the vital force (Prana) pervading in the body.</p>	Lecture cum discussion	-	
3min	To highlight the importance of pranayama	<p><b>Importance of Pranayama:</b></p> <p>Pranayama is the fourth and very important stage of Ashtanga Yoga. Yoga without Pranayama is not Yoga at all. That is why Pranayama is called the soul of Yoga. As a bath is necessary for purifying the body, similarly, Pranayama is essential for purifying the mind.</p>	Lecture cum discussion	-	



TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/LEARNERS ACTIVITY	A.V AIDS	EVALUATION
10 min	To enumerate the advantages of pranayama.	<p><b>Advantages:</b></p> <p>(1) Pranayama keeps the body fit and healthy. It reduces excessive fat.</p> <p>(2) One can live a long life through Pranayama. Pranayama improves the power of memory and eliminates mental disorders.</p> <p>(3) Pranayama tones up the stomach, the liver, the bladder, the small and the large intestines and the digestive system, purifies tubular channels and removes sluggishness from the body, and kindles gastric fire; the body becomes healthy and the inner voice begins to be heard.</p> <p>(4) Constant practice of Pranayama strengthens the nervous system. The mind becomes calm and capable of concentration, and rouses spiritual power.</p> <p>(5) Most importantly negative thinking comes to an end. The person practicing Pranayama is always full of positive thoughts.</p>	Lecture cum discussion	-	List out the advantages of pranayama ?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
3 min	To know the pre requisites of pranayama	<p><b>Prerequisites:</b></p> <p>Pranayama should be practiced</p> <p>(a) In the morning or in the evening.</p> <p>(b) Sitting on the floor. The postures suitable are Vajrasana, Padmasana, Siddhasana, or Sukhasana. (In the beginning you may sit erect on a chair. Keep the spine fully vertical and stretched)</p> <p>(c) At the same time regularly on empty stomach, a small cup of milk may be taken but not solid food.</p> <p>(d) Do not take bath immediately after the practice of Pranayama. Rest for half an hour before taking bath.</p> <p><b>Sitting Posture in Pranayama:</b></p> <p>While conducting Pranayama, the spine should be erect. If you are not in a position to sit in any of those asanas in the beginning, you may sit on a chair for Pranayama. You will keep your spine erect, vertical, and stretched.</p>	Lecture cum discussion	-	What are the prerequisites necessary before performing pranayama?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/LEARNERS ACTIVITY	A.V AIDS	EVALUATION
15 min	To explain on the techniques of pranayama	<p><b>Techniques of pranayama</b></p> <p><b>Techniques:</b></p> <p><b>Kapalabhati ("Breath of Fire")</b></p> <p><b>Duration/repetitions:</b> Beginners may start with a 3-minute practice and, in a month or two, work up to a 5-minute non-stop practice</p> <p><b>Technique:</b></p> <p>Kapalabhati, the focus is only on forceful exhalation "Exhale from your nose with full strength and the abdomen will go in automatically.</p> <p>Concentrate on exhaling vigorously and your abdomen will contract automatically. Keep expelling the breath. Contraction and expansion of the abdomen during exhalation and inhalation will occur automatically</p>	Demonstration		Performance of pranayama technique by the participants.

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
		<p><b>Anuloma-Viloma (Alternate nostril breathing)</b></p> <p><b>Duration/repetitions:</b> Minimum three times. Maximum: 10 minute</p> <p><b>Technique:</b></p> <p>Block the right nostril with the right thumb and left nostril with the right middle and ring fingers. Little finger and the index finger are free and the palm stays above the nose. Don't place the palm in front of the nose as it blocks the free flow of the air. Apply only mild pressure to the nostrils. To begin, close the right nostril with the thumb. While lifting the ribcage and bringing out the chest (thoracic breathing), inhale from the left nostril. After completion of inhalation, close the left nostril with the middle and the ring finger, lift the thumb off the right nostril and exhale. This makes one round. The second round begins with the left nostril inhale and so on. In the beginning, breathe in and out slowly. Gradually pick up the speed and progress from slow to moderate or even fast rate.</p>	Demonstration		Performance of the pranayama technique by the participants.

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
		<p><b>Nadi Shodhana (subtle nervous system purification)</b></p> <p><b>Duration/repetitions:</b> Minimum three times. Maximum: unlimited.</p> <p><b>Technique:</b></p> <p>Close the right nostril with the thumb and inhale very slowly from the left nostril. Upon completion of inhaling, hold the breath in and apply the chin lock and the root lock. Release the chin lock and very slowly exhale from the right nostril. Upon completion of exhaling, inhale very slowly from the right nostril and hold the breath in with chin lock and root lock in place. When ready to release, exhale very slowly from the left nostril. This completes one round. The second round begins with left nostril inhalation and so on. Ratio for breathing and breath holding: Beginners should maintain the ratio of 1:2:2 for inhalation-hold (after inhale) and exhalation.</p>	Demonstration		Performance of the pranayama technique by the participants.

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
5 min	To enumerate on the benefits of pranayama	<b>BENEFITS OF pranayama:</b> <ul style="list-style-type: none"> <li>• The attainment of perfect balance of mind and body.</li> <li>• Improves in -confidence.</li> <li>• consciousness of possessing the power to accomplish our <ul style="list-style-type: none"> <li>○ desires.</li> </ul> </li> <li>• Decreased level of depression</li> <li>• Increased level of physical activity</li> <li>• Improved balance and coordination.</li> <li>• Decrease anxiety</li> <li>• Decrease pain</li> <li>• Enhance sleep</li> <li>• Reduce recovery time and shorten hospital stays</li> <li>• Strengthen the immune system and enhance the ability to heal</li> <li>• Increase sense of control and well-being.</li> </ul>	Lecture cum discussion	-	List out the benefits of pranayama.

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
		<p><b>Psychological Benefits</b></p> <p>Pranayama is a technique for regulating one's all emotional and mental states and even the way in which one behaves. Changes in the respiration induce changes in the rest of the autonomic nervous system and the physiological reaction of the autonomic nervous system and the physiological reaction is an essential component of emotionality.</p> <p>Pranayama controls the autonomic nervous system and this system regulates the secretion of adrenaline, thyroxin and other hormones of the body. These secretions of these hormones plays a prominent role in creating one's emotional states. By learning to bring changes in the autonomic nervous system through pranayama, one can modify autonomic arousal and modulate subsequent levels of emotionality. The breath forms a bridge between the conscious and the unconscious. Emotions such as anger, depression and fear all have their characteristic patterns of irregular breathing.</p>	Lecture cum discussion		

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
5min	To know the effects of pranayama on depression	<p>Through pranayama one learns to consciously alter his breathing and thus his emotional state. One can attain a calm and alert state through smooth and even diaphragmatic breathing. This helps a person to become cognizant of feelings that have been held outside of awareness. Therapeutical Effects</p> <p><b>Pranayama and Depression</b></p> <p>A considerable body of data suggests that biological depression is associated with excessive stress response system activation. Almost all effective antidepressants calm this system down. Preliminary evidence suggests that pranayama also quiets the stress response system. Furthermore, there is some evidence that the relationships between the two cerebral hemispheres, between the anterior and posterior parts of the brain, and between the top of the cortex and the subcortical regions are disturbed in depression. Pranayama practices probably help balance the activity between the cortical and subcortical regions. Pranayama may work like electronic vagal nerve stimulation, which has been shown to be effective for depression. role the increased parasympathetic and</p>	Lecture cum discussion	-	Explain the importance of pranayama on depression ?



TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
		<p>sympathetic activity induced by various Pranayama have in mproving the function of the stress response remains speculative but is likely to be extremely important. Activation of forebrain reward systems may also play a role. Changes in acid base balance in the brain are less likely to be a significant part of the effects of the breathing. Another unexplored phenomenon is that intense breathing (or indeed regular breathing) causes the expiration of oxidant chemicals from body metabolism called TBARS (thiobarbituric reactive acid substances). Whether detoxification of oxidants by exhalation through the lungs is beneficial for disorders involving excess oxidation damage (such cardiovascular and neurodegenerative disease) and whether this would enhance the effect of antioxidants in delaying aging, is purely hypothetical. Also hyperventilation increases renal output.</p>	Lecture cum discussion		

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHERS/ LEARNERS ACTIVITY	A.V AIDS	EVALUATION
3min	To know the effects of pranayama on depression	<p><b>Effect on Depression</b></p> <p>Pranayam has been shown to have a 62%-79% success rate in the treatment of depression, regardless of severity. Relief from depression, determined by psychiatric evaluation and standard psychiatric measures (Beck Depression Inventory, Hamilton Rating Scale for Depression, and others) was experienced within three weeks. Published studies further suggest that pranayam normalizes patients' brainwave patterns, increases serum prolactin (a "wellbeing" hormone), and is as effective as standard antidepressant drug regimens. Yet it is safe, free of unwanted side effects, cost effective, and self empowering. Hence practice pranayama on daily basis to have the quality of life.</p> <p><b>"Breathe Well And Get Rid of Depression"</b></p>	Lecture cum discussion	-	What are the effects of pranayama on depression ?

## பிராணயாமா பாடத்திட்டம்

தலைப்பு	:	பிராணயாமா
குழு	:	வயது முதிர்ந்தோர்
இடம்	:	வயது முதிர்ந்தோர் இல்லம்
கால அளவு	:	6 வாரங்கள்
கற்பிக்கும் முறை	:	சொற்பொழிவு மற்றும் விவாதம்
கற்பிக்கும் ஊடகம்	:	செயல்விளக்கம்
கல்வியாளர்	:	2ம் வருட முதுநிலை பட்டம் (செவிலியர்) மாணவர் அருண் செவிலியர் கல்லூரி வேலூர்.

### பொதுவான நோக்கம்

பிராணயாமா கற்பதன் மூலம் வயது முதிர்ந்தவர்கள் தாங்கள் விரும்பத்தக்க அணுகுமுறையை அடையவும், சுயமாக எதையும் சாதிக்கவும் உதவுகிறது.

**குறிப்பிட்ட நோக்கங்கள் :** இந்த பயிற்சியின் முடிவில், இதில் பங்கேற்ற அனைத்து உறுப்பினர்களும், கீழே கொடுக்கப்பட்டுள்ள அடைய முடிகிறது.

1. பிராணயாமாவைப் பற்றி அறிய
2. பிராணயாமாவைப் பற்றி விளக்க
3. பிராணயாமாவின் முக்கியத்துவத்தை பிரதிபலிக்க
4. பிராணயாமாவினால் கிடைக்கும் சாதகங்களை விளக்க
5. பிராணயாமாவின் முன் தேவைகளை அறிய
6. பிராணயாமாவினால் கிடைக்கும் நன்மைகளை விளக்க
7. பிராணயாமாவினால் மன அழுத்தத்தில் ஏற்படும் மாற்றங்களை அறிய

### பிராணயாமா:

பிராணயாமா யோகாவின் ஒரு வகை ஆகும். இவை சுவாசத்தை குறித்து விளக்குகிறதா பிராணத்தை கட்டுப்படுத்தவும் மற்றும் வாழ்க்கைக்குத் தேவையான சக்தியை சுவாசத்தை ஒழுங்குமுறைப்படுத்துவதன் மூலம் அடைய முடிகிறது.

(சுவாமி ராம்தேவ்)

## பிராணயாமாவின் பொருள்:

‘பிராணயாமா’ என்பதன் பொருள் ‘சுவாவத்தை விரிவாக்குதல்’ பிராணயாமாவின் முறையானது சுவாசத்தை தடைசெய்து, முக்கியமாக சக்தியை கட்டுப்படுத்தி மற்றும் முறைப்படுத்துகின்றன. பிராணயாமாவின் முக்கிய நோக்கமானது ஊக்கப்படுத்துதல், முறைப்படுத்துதல் மற்றும் முக்கிய சக்தியை சமச்சீர்படுத்துதல் ஆகும்.

## பிராணயாமாவின் முக்கியத்துவம்

பிராணயாமா ஆஸ்டாவக யோகாவில் நான்காவது மற்றும் மிக முக்கியமான நிலையாக கருதப்படுகிறது. பிராணயாமா இல்லாத யோகா, யோகாவாக இல்லை. எனவேதான் பிராணயாமா யோகாவின் மூச்சாக கருதப்படுகிறது. குளியல் எவ்வாறு உடலை சுத்தம் செய்ய தேவைப்படுகிறதோ, அதேபோல பிராணயாமா மனதை சுத்தம் செய்ய உதவுகிறது.

## நன்மைகள்

1. பிராணயாமா உடலை பொருத்தமாக மற்றும் ஆரோக்கியமாக வைக்க உதவுகிறது.
2. பிராணயாமாவின் மூலமாக நீண்ட ஆயுள் கிடைக்கிறது. பிராணயாமா ஞாபகசக்தியை அதிகரிக்கவும் மற்றும் மனநோய்களை தீர்க்க உதவுகிறது.
3. பிராணயாமா வயிறு மற்றும், நுரையீரல், சிறுநீர்ப்பை, சிறு மற்றும் பெருங்குடல் மற்றும் ஜீரண சக்தியை அதிகரிக்கிறது. ஒத்த நாளங்களை சுத்தம் செய்யவும் மற்றும் தேவையற்ற பொருட்களை உடலிலிருந்து வெளியேற்றுகிறது.
4. தொடர்ந்து பிராணயாமா செய்வதன் மூலம் நரம்பு மண்டலங்கள் பயன்படுகிறது. மணம் சாந்தமாகவும் மற்றும் ஒருமுகப்படுத்தவும் பக்தியை அதிகரிக்கவும் உதவுகிறது.
5. கடைசியாக எதிர்மறை சிந்தனைகள் முடிவுக்கு வருகிறது. பிராணயாமாவை செய்பவர் எப்பொழுதும் நேர்மறைச் சிந்தனைமிக்கவராய் இருக்கிறார்.

## முன்தேவைகள்

### பிராணயாமா கற்பது

- a. காலை (அ) மாலையில்
- b. தரையில் அமரவேண்டும்
- c. வஜ்ராஸ்னா, பத்மாசனா, சித்ராசனா மற்றும் சுகாசனா வடிவில் இருக்க வேண்டும்.
- d. முதலாவது
- e. ஒரு சிறிய கப் அளவு பால் இடைவிடாமல் மற்றும் வெறும் வயிற்றில் சாப்பிடலாம். திட உணவு சாப்பிட வேண்டாம். பிராணயாமா செய்து உடன் உடனடியாக குளிக்க கூடாது. அரைமணி நேரமாவது ஓய்வுக்கு பின்னால் குளிக்கலாம்.

## பிராணயாமாவின் அணுகுமுறை

பிராணயாமா செய்யும்பொழுது நிமிர்ந்திருக்க வேண்டும்

நீங்கள் ஏதாவது மேற்குறிப்பிட்ட முறையில் அமரவில்லையென்றால், ஒரு நாற்காலியில் அமர்ந்து பிராணயாமா செய்யலாம். தொடர்ந்து முதுகை நேராகவும் வளையாமல் நிமிர்ந்திருக்க வேண்டும்.

## பிராணயாமாவின் நுட்பங்கள்:

### நுட்பங்கள்

### கபாலபாட்டி (தீ முச்சு)

### கால அளவு/மீண்டும் செய்கையில்:

புதிதாக செய்பவர்கள், 3 நிமிடங்கள் செய்து பார்க்கலாம், ஒன்று அல்லது இரண்டு மாதங்கள் கழித்து 5 நிமிடங்கள் வரை இடைவெளி விடாமல் செய்யலாம்.

### நுட்பங்கள்

கபாலபாட்டி செயல்முறையில் உங்களுடைய கவனம் முழுவதும் மிக அழுத்தமாக சுவாசத்தை வெளியேற்றுதல், அதாவது காற்றை முக்கின் வழியாக முழு பலத்தோடு வெளியேற்றும்பொழுது உங்கள் வயிற்றின் அடிப்பகுதி தானாகவே உள்ளே சென்று விடுகிறது. முழு கவனமும் காற்றை வெளியேற்றுவதில் இருக்கும் பொழுது உங்கள் வயிற்றின் அடிப்பகுதியானது தானாகவே சுருங்குகிறது. தொடர்ந்து சுவாசத்தை வெளியேற்றம் செய்யுங்கள். காற்றை வெளியேற்றும் போது உள்ளே வாங்கும் பொழுது உங்களுடைய வயிற்றின் அடிப்பகுதி தானாகவே சுருங்கி விரிவடைகிறது.

## நதிஷோதனா (நுண்ணிய நரம்பு மண்டலம் சுத்திகரிப்பு)

### கால அளவு / மீண்டும் செய்கையில்:

குறைந்தது மூன்று முறை, அதிகபட்சம் வரைமுறை கிடையாது.

### நுட்பங்கள்:

வலது பக்க நாசியை கட்டை விரலால் முடிக்கொண்டு காற்றை மெதுவாக இடது பக்க நாசியின் மூலமாக உள்ளே இழுக்க வேண்டும் காற்றை உள்ளே இழுத்த பிறகு, முக்கை பிடித்துக் கொண்டு இழுக்க வேண்டும். பிறகு மெதுவாக வலது பக்க நாசியின் மூலமாக காற்றை மெதுவாக காற்றை உள்ளே இழுக்கவும், காற்றை முழுவதுமாக உள்ளே இழுத்தபிறகு முக்கைப் பிடித்துக்கொண்டு இடது பக்க நாசியின் வழியாக காற்றை மெதுவாக வெளியேற்ற வேண்டும் இவ்வாறு முதல் சுற்ற முடிவடைகிறது இரண்டாவது சுற்றின் போது இடது பக்க நாசியின் மூலமாக காற்றை

உள்ளே இழுத்து வலது பக்க நாசியின் வழியாக வெளியேற்றும் முறையை செய்ய வேண்டும்.

சுவாசிக்கும் மற்றும் சுவாசத்தைப் பிடுத்து வைத்திருக்கும் விகிதம்:

புதிதாக செய்பவர்கள் 1:2:2 என்ற விகிதத்தில் சுவாசத்தை உள்ளதாக பிடிக்கவும் (சுவாசத்தை உள்ளே இழுத்த பிறகு மற்றும் வெளியேற்றம் பொழுது

### உளவியல் சார்ந்த நன்மைகள்

பிராணயாமா என்பது ஒரு நுட்பம். இவை ஒருவருடைய எல்லா உணர்ச்சிகளையும் மற்றும் மனநிலையையும், அதுமட்டுமல்லாது ஒருவருடைய நடவடிக்கைகளையும் சீரமைக்கிறது. சுவாசத்தில் ஏற்படும் மாற்றத்தால் நரம்பு மண்டலத்தின் எல்லா பகுதியும் மற்றும் உடல் பகுதிகளையும் உணர்ந்துகொள்கிறது. பிராணயாமா நரம்பு மண்டலத்தின் அட்ரினலின் சுரப்பதையும், தைராக்க்சின் மற்றும் சுரபிகள் ஒருமுறைப்படுத்துகிறது. இந்த சுர மண்டலங்கள் ஒருவருடைய உணர்வுகளுக்கு முக்கிய காரணமாய் விளங்குகிறது. உணர்வுகள் அதாவது கோபம், மன அழுத்தம் மற்றும் பயம் ஆகியவை சமச்சீர் சுவாசத்தால் ஏற்படுகிறது. ஆனால் பிராணயாமா ஒருவருடைய சுவாசத்தை சமச்சீர்படுத்துகிறது.

### பிராணயாமா மற்றும் மன அழுத்தம்

உயிரியல் சம்பந்தமாக மன அழுத்தம் அதிகமான மன அழுத்தத்தையும் அதன் எதிர் கூறுகளின் விளைவுகள் ஆகும். ஆரம்பிக்கப்பட்ட விளைவுகள் பிராணயாமாவின் மன அழுத்த குறைவுகளை வெளிகாட்டுகிறது. மன அழுத்து குறைகளை வெளிகாட்டுகிறது. மன அழுத்தம் காரணமாக இரண்டு செரிபரல் கிமெல்பியர்ஸ் மற்றும் முன், பின்பக்க முளை பகுதியையும் மற்றும் மேல் பகுதி கோர்ட்டுக்ஸ் அகியவை பாதிக்கப்படுகிறது. பிராணயாமா கோர்ட்டுக்ஸ் மற்றும் சப் கோர்ட்டுக்ஸ் பகுதியை வேலையை செய்யும். பிராணயாமா ஒரு எலக்ட்ரானிக் நரம்பு உத்தரவை செய்வதுடன், இவை மன அழுத்தத்திற்கு மிகவும் உதவுகிறது. மற்றொரு கண்டுபிடிக்கப்பட்டு ஒரு விந்தை என்னவென்றால் உள்ளாக மூச்சு ஆக்ஸிடை கெமிக்கல்ஸ் என்ற ஒருவகை TBARS (தியோபர்மிட்சியூரிக், தீஆக்டிவ் ஆசிட் சப்ஸ்டன்ஸ்

### மன அழுத்தத்தின் விளைவுகள்

பிராணயாமா செய்வதன் மூலம் 62% - 79% வரை மன அழுத்தத்தை சொற்பொழிவு கட்டுப்படுத்துகிறது. மன அழுத்தத்திலிருந்து விடுதலை இவை 3 வாரங்களில் தெரிந்து விடும். மற்றும் பல ஆராய்ச்சிகள் கூறுவது என்சைவன்தால் பிராணயாமா முளை பகுதி சீரமைக்கிறது. செரம் புரோலோபினை அதிகரிக்கிறது. இதனால் எந்தவொரு பக்க விளைவுகளும் இல்லை. செலவு குறைவு

‘நன்றாக சுவாசியுங்கள், மன அழுத்தத்தை விட்டு வெளியேறுங்கள்’

அறியோமா - விலோமா (மாற்று நாசியில் சுவாசம்)

கால அளவு / மீண்டும் செய்கையில்:

குறைந்தது 3 முறை அதிகபட்சம் 10 நிமிடங்கள்

நுட்பங்கள்

மூக்கின் வலது பக்க நாசியை வலது கையின் கட்டை விரலால் மூடி மற்றும் இடது பக்க நாசியை வலது கையின் நடுத்தர மற்றும் மோதிர விரலால் மூடிக்கொள்ள வேண்டும். மார்வு சுவாசத்தின் வழியாக மார்பை வெளியே கொண்டு வரும்போது இடதுபக்க நாசியின் மூலாக சுவாசிக்க வேண்டும். காற்றை உள்ளே சுவாசித்த பிறகு, இடது பக்க நாசியை நடு மற்றும் மோதிர விரலால் மூடி வலது நாசியில் உள்ள கட்டை விரலால் எடுத்து காற்றை வெளியேற்ற வேண்டும் இப்படியாக ஒரு சுற்று முடிவடைகிறது. இரண்டாவது சுற்றில் இடது பக்க நாசியில் காற்றை உள்வாங்கும் மற்றும் இதர செய்முறைகளை செய்ய வேண்டும். ஆரம்பத்தில் சுவாசத்தை மெதுவாக உள்ளிழுத்து வெளியேற்றம் செய்ய வேண்டும் அல்ல துநன்கு கவனமாக செய்யலாம்

வயது முதிர்ந்தவர்களின் பல்வேறு கருத்துகளுக்கான மாதிரி படிவம்

நோக்கம்

இந்த மாதிரிப்படிவம் வயது முதிர்ந்தவர்களின் பல்வேறு விளக்கங்கள் நிறைந்த அடையாள வயது, பாலிமை, திருமண நிலை, படிப்பு, வேலை, மதம், வருமான ஆதாரம், குடும்பத்தின் மாதிரி, முதியோர் இல்லத்தில் தங்கிய கால அளவு மற்றும் பல

**வழிமுறை**

பின்வரும் தகவல்களை ஒரு புக் மார்க் ( ) செய்யவும்

**அடையாள தகவல்:**

**மாதிரி எண்:**

**1. வயது வருடங்களில்**

- 1 60-65 வயது
- 2 66-70 வயது
- 3 71-75 வயது
- 4 76-80 வயது


**2. பாலிமை:**

- 1 ஆண்
- 2 பெண்


**3. மதம்**

- 1 இந்து
- 2 முஸ்லீம்
- 3 கிறிஸ்தவம்
- 4 இதர (குறிப்பிடவும்)


**4. கல்வித்தகுதி**

- 1 படிக்காதவர்
- 2 தொடக்க நிலை பள்ளி
- 3 இளநிலைப் பள்ளி
- 4 முது நிலைப் பள்ளி
- 5 பட்டம் மற்றும் மேலாக


**5. திருமண நிலை**

- 1 தனிக் குடும்பம்
- 2 கூட்டுக் குடும்பம்
- 3 பிரிந்த குடும்பம்


**6. திருமண நிலை**

- 1 திருமணமானவர்

--



- 2 திருமணமாகாதவர்
- 3 பிரிந்து / விவாகரத்து
- 4 விதவை / மனைவியை இழந்தவர்


**7. மாத வருமானம்**

- 1 1000 - 2000
- 2 2001 - 6000
- 3 6001 - 10000
- 4 > 10000
- 5 ஏதுமில்லை


**8. வருமான ஆதாரம்**

- 1 ஒய்வூதியம்
- 2 அரசாங்க உதவி
- 3 சொத்து
- 4 சேமிப்பு
- 5 பிற (குறியிடவும்)


**9. உடன் பிறப்புகளின் ஆதாரம்**

- 1 குழந்தை இல்லை
- 2 ஒன்று
- 3 இரண்டு
- 4 இரண்டிற்கு மேல்


**10. கணவன் (அ) மனைவி உயிரோடிருந்தால், இந்த இல்லத்தில் வசிக்கிறார்கள்**

- 1 ஆம்
- 2 இல்லை


**11. முதியோர் இல்லத்தில் நீங்கள் தங்கிய கால அளவு**

- 1 ஒரு வருடங்களுக்கு குறைவாக
- 2 2-3 வருடம்
- 3 4-6 வருடம்
- 4 6 வருடம்


## முதியோர் மன அழுத்த அளவு

(எஸ்வஜ் எட் ஆல் 1982-ம் ஆண்டு உருவாக்கப்பட்டது)

### நோக்கம்

முதியோர்களின் மன அழுத்த அளவை மதிப்பீடு செய்ய இந்த படிவத்தில் 30ஆம் / இல்லை என்று பதில் அளிக்கும் வகையில் கேள்விகள் கொடுக்கப்பட்டுள்ளது.

### வழிமுறைகள்

கீழே கொடுக்கப்பட்டுள்ள கேள்விகளுக்கு ஆம்(அ) இல்லை என்று தயவு செய்து பதில் அளிக்கவும்

வரிசை எண்	கேள்விகள்	பதில் ஆம்/ இல்லை	மதிப்பீடு
1	நீங்கள் உங்களுடைய வாழ்க்கையில் பொதுவாக திருப்தி அடைந்திருக்கிறீர்களா?		
2	உங்கள் செயல்பாடுகள் மற்றும் விருப்பங்களை அதிகமாக கைவிட்டிருக்கிறீர்களா?		
3	உங்கள் வாழ்க்கை வெறுமையாக உள்ளது என நினைக்கிறீர்களா?		
4	நீங்கள் அடிக்கடி சலிப்புத் தன்மை கொள்கிறீர்களா?		
5	எதிர்காலத்தை குறித்த நம்பிக்கை உங்களுக்கு இருக்கிறதா		
6	உங்களை கவலைக்குள்ளாக்கும் எண்ணங்கள் உங்கள் தலைவலியாய் இருக்கிறதா?		
7	நீங்கள் நல்ல மனப்பான்மையை எல்லா நேரங்களிலும் கொண்டுள்ளீர்களா?		
8	ஏதோ ஒரு கெட்ட சம்பவம் நடக்கப்போகிறது		
9	நீங்கள் எல்லா நேரங்களிலும் சந்தோஷமாக இருக்கிறீர்களா?		
10	நீங்கள் அடிக்கடி உதவியற்றவர்களாய் இருக்கிறோம் என்ற எண்ணம் வருகிறதா?		
11	நீங்கள் விதண்டவாதம் செய்பவர்களால் அடிக்கடி அமைதியற்ற நிலையில் இருக்கிறீர்களா?		
12	நீங்கள் வெளியே சென்று புதிய காரியங்களை செய்தவற்கு பதிலாக, வீட்டிலே இருக்க விரும்புகிறீர்களா?		
13	நீங்கள் எதிர்காலத்தை குறித்து அடிக்கடி கவலைப்படுகிறீர்களா?		
14	நீங்கள் மற்ற காரியங்களை விட உங்களுடைய		

வரிசை எண்	கேள்விகள்	பதில் ஆம்/ இல்லை	மதிப்பீடு
	ஞாபக சக்தியின் பிரச்சனைதான் அதிகம் என்று நினைக்கிறீர்களா?		
15	நீங்கள் இப்பொழுது உயிரோடிருப்பது மிகவும் நல்லது என்று நினைக்கிறீர்களா?		
16	நீங்கள் மனச்சோர்வு உள்ளவர்களாய் இருக்கிறீர்களா?		
17	நான் இப்பொழுது இப்படியாக இருப்பது யாருக்கும் உபயோகமற்றவன் என்று நினைக்கிறேன்?		
18	உங்கள் கடந்த காலத்தை குறித்து அதிகம் கவலைப்படுகிறீர்களா?		
19	உங்களுடைய வாழ்க்கை மிகவும் உற்சாகமாக இருக்கிறது என்று நினைக்கிறீர்களா?		
20	புதிய காரியங்கள் செய்வதற்கு உங்களால் முடியாத காரியம் என்று நினைக்கிறீர்களா?		
21	உங்களுக்கு முழு பலன் இருக்கிறது என்று நினைக்கிறீர்களா?		
22	உங்களுடைய சூழ்நிலை நம்பிக்கையற்றதாய் இருக்கிறது என்று நினைக்கிறீர்களா?		
23	மற்றவர்கள் உங்களைவிட சிறந்தவர்கள் என்று நினைக்கிறீர்களா?		
24	சிறிய காரியங்களில் நீங்கள் அடிக்கடி வெறுப்படைகின்றீர்களா?		
25	நீங்கள் அடிக்கடி உதவியற்றவர்களாய் இருக்கிறோம் என்ற எண்ணம் வருகிறதா?		
26	கவனம் செலுத்துவதில் ஏதாவது பிரச்சனை இருக்கிறதா?		
27	காலையில் எழும்புவதை உங்களுக்கு மகிழ்ச்சியூட்டுகிறதா?		
28	நீங்கள் சமூக கூட்டங்களை தவிர்க்க விரும்புகிறீர்களா?		
29	முடிவு எடுப்பது உங்களுக்கு எளிதாக இருக்கிறதா?		
30	உங்களுடைய மனம் தெளிவாக எப்பொழுதும் போல் இருக்கிறதா?		

**Annxure-XIV**

**MASTER CODE SHEET**

DEMOGRAPHIC VARIABLES												DEPRESSION SCORE	
SN	AGE	GEN	REL	EDU	TOF	MAR	MI	SOI	NOC	SRH	DSO	PRE TEST	POST TEST
1	70	2.2	3.1	4.2	5.1	6.4	7.5	8.2	9.4	10.2	11.2	18	10
2	61	2.2	3.1	4.5	5.3	6.3	7.5	8.5	9.2	10.2	11.3	17	9
3	63	2.2	3.1	4.4	5.2	6.3	7.4	8.1	9.4	10.2	11.1	11	9
4	72	2.2	3.1	4.1	5.3	6.1	7.2	8.3	9.4	10.2	11.3	15	15
5	62	2.2	3.1	4.3	5.1	6.4	7.2	8.2	9.4	10.2	11.3	22	18
6	64	2.2	3.1	4.2	5.2	6.4	7.5	8.5	9.4	10.2	11.2	19	19
7	77	2.2	3.1	4.2	5.2	6.4	7.1	8.5	9.5	10.2	11.2	20	10
8	67	2.2	3.1	4.1	5.2	6.4	7.5	8.2	9.4	10.2	11.1	22	14
9	72	2.2	3.1	4.1	5.2	6.4	7.5	8.2	9.3	10.1	11.3	28	4
10	68	2.2	3.1	4.1	5.2	6.4	7.5	8.2	9.4	10.1	11.2	21	12
11	66	2.2	3.1	4.1	5.2	6.4	7.5	8.2	9.2	10.2	11.2	24	10
12	79	2.2	3.1	4.1	5.2	6.4	7.5	8.1	9.4	10.2	11.4	15	11
13	77	2.2	3.1	4.1	5.2	6.4	7.5	8.4	9.4	10.2	11.3	24	16
14	79	2.2	3.1	4.2	5.2	6.4	7.5	8.1	9.3	10.2	11.2	17	18

DEMOGRAPHIC VARIABLES												DEPRESSION SCORE	
SN	AGE	GEN	REL	EDU	TOF	MAR	MI	SOI	NOC	SRH	DSO	PRE TEST	POST TEST
15	76	2.2	3.1	4.1	5.1	6.2	7.2	8.2	9.1	10.2	11.4	22	4
16	66	2.2	3.1	4.2	5.1	6.2	7.1	8.2	9.4	10.2	11.4	10	10
17	61	2.2	3.1	4.1	5.1	6.3	7.5	8.1	9.2	10.2	11.2	25	25
18	75	2.2	3.1	4.1	5.1	18.1	7.1	8.2	9.1	10.2	11.2	24	24
19	63	2.2	3.1	4.1	5.3	6.4	7.5	8.2	9.3	10.2	11.2	30	30
20	74	2.2	3.1	4.2	5.1	6.3	7.5	8.2	9.1	10.2	11.1	26	26
21	71	2.2	3.3	4.2	5.2	6.1	7.2	8.1	9.3	10.2	11.1	15	15
22	72	2.2	3.1	4.4	5.3	6.1	7.3	8.1	9.1	10.2	11.1	28	28
23	75	2.1	3.1	4.2	5.3	6.4	7.3	8.1	9.4	10.2	11.1	5	5
24	77	2.1	3.1	4.4	5.3	6.4	4	8.1	9.4	10.2	11.1	6	6
25	60	2.1	3.1	4.2	5.2	6.4	7.1	8.4	9.4	10.2	11.1	23	23
26	66	2.1	3.2	4.1	5.1	6.2	7.1	8.2	9.2	10.2	11.2	16	16
27	75	2.1	3.3	4.5	5.1	6.1	7.3	8.1	9.2	10.2	11.3	4	4
28	71	2.1	3.1	4.3	5.3	6.3	7.2	8.2	9.4	10.2	11.2	28	28
29	61	2.1	3.1	4.4	5.1	6.1	7.2	8.2	9.3	10.2	11.2	27	27
30	66	2.1	3.1	4.1	5.3	6.4	7.2	8.4	9.3	10.2	11.2	26	26

DEMOGRAPHIC VARIABLES												DEPRESSION SCORE	
S.NO	AGE	GEN	REL	EDU	TOF	MAR	MI	SOI	NOC	SRH	DSO	PRE TEST	POST TEST
31	71	2.1	3.1	4.4	5.1	6.4	7.2	8.2	9.4	10.2	11.3	26	10
32	74	2.1	3.1	4.1	5.1	6.4	7.1	8.2	9.2	10.2	11.2	24	9
33	66	2.1	3.1	4.1	5.1	6.4	7.5	8.2	9.4	10.2	11.3	26	9
34	75	2.1	3.3	4.4	5.3	6.3	7.2	8.1	9.4	10.2	11.2	23	15
35	67	2.1	3.1	4.3	5.1	6.4	7.1	8.2	9.4	10.2	11.3	27	18
36	60	2.2	3.1	4.1	5.2	6.4	7.5	8.1	9.4	10.2	11.2	21	19
37	66	2.1	3.1	4.1	5.2	6.4	7.1	8.1	9.3	10.2	11.3	28	10
38	63	2.2	3.1	4.1	5.2	6.4	7.5	8.5	9.1	10.2	11.2	27	14
39	71	2.2	3.1	4.2	5.2	6.4	7.1	8.1	9.1	10.2	11.3	23	4
40	75	2.2	3.1	4.1	5.2	6.4	7.1	8.2	9.4	10.2	11.3	25	12
41	71	2.2	3.1	4.1	5.2	6.4	7.5	8.1	9.4	10.2	11.1	19	10
42	60	2.1	3.1	4.2	5.2	6.1	7.1	8.2	9.3	10.2	11.3	28	11
43	63	2.1	3.1	4.1	5.2	6.4	7.1	8.2	9.4	10.2	11.2	25	16
44	61	2.2	3.1	4.1	5.2	6.4	7.5	8.4	9.3	10.2	11.2	25	18
45	72	2.2	3.1	4.1	5.3	6.4	7.5	8.2	9.3	10.2	11.3	23	4
46	60	2.2	3.1	4.1	5.2	6.4	7.5	8.4	9.3	10.2	11.2	18	10

DEMOGRAPHIC VARIABLES												DEPRESSION SCORE	
S.NO	AGE	GEN	REL	EDU	TOF	MAR	MI	SOI	NOC	SRH	DSO	PRE TEST	POST TEST
47	63	2.1	3.1	4.2	5.2	6.4	7.1	8.4	9.4	10.2	11.1	17	9
48	66	2.1	3.2	4.1	5.1	6.2	7.1	8.2	9.2	10.2	11.2	11	9
49	75	2.1	3.3	4.5	5.1	6.1	7.3	8.1	9.2	10.2	11.3	15	15
50	71	2.1	3.1	4.3	5.3	6.3	7.2	8.2	9.4	10.2	11.2	22	18
51	65	2.1	3.1	4.4	5.1	6.1	7.2	8.2	9.3	10.2	11.2	19	19
52	66	2.1	3.1	4.1	5.3	6.4	7.2	8.4	9.3	10.2	11.2	20	10
53	71	2.1	3.1	4.4	5.1	6.4	7.2	8.2	9.4	10.2	11.3	22	14
54	72	2.1	3.1	4.1	5.1	6.4	7.1	8.2	9.2	10.2	11.2	28	4
55	67	2.1	3.1	4.2	5.1	6.4	7.5	8.2	9.4	10.2	11.3	21	12
56	77	2.2	3.3	4.4	5.3	6.3	7.2	8.1	9.4	10.2	11.2	24	10
57	66	2.1	3.1	4.3	5.1	6.4	7.1	8.2	9.4	10.2	11.3	15	11
58	60	2.2	3.1	4.1	5.2	6.4	7.5	8.1	9.4	10.2	11.3	24	16
59	68	2.1	3.1	4.2	5.2	6.4	7.1	8.1	9.3	10.2	11.3	17	18
60	63	2.2	3.1	4.1	5.2	6.4	7.5	8.5	9.1	10.2	11.2	22	4

## SELF INTRODUCTION



## SCHOLAR CONDUCTING PRE-TEST





## SCHOLAR DEMONSTRATING PRANAYAMA



## SCHOLAR CONDUCTING POST-TEST

